MASTER PLAN for the town of DERRY, NH 1986 WW CGreel F.P.Clark HAHill . F.E. Rager Mrs J. Willimor J. Montgomer WINDHA HANOVER, NH 0375 HANS KLUNDER ASSOCIATES

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MASTER PLAN

for the

TOWN OF DERRY, NEW HAMPSHIRE

1986



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This report is dedicated to the late Geraldine Bangs, approximative to the New Hampshire Legislature, a dedicated citizen and first Chairman of the Gitzens' Committee for Deny's Master Plan. It is largely due to her untiling efforts that Deny is once more undertaking a dock towards its future, and her deviation to the community is most materially returnal leftered.

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INTRODUCTION

This Master Plan document is prepared for the Town of Derry and includes statements pertaining to land use and development proposals illustrated with maps, diagrams, and charts. It is designed to serve and guide the Planning Board in its assigned responsibilities and is prepared in compliance with Chapter 674:2 of the New Hampshire Planning and Land Use Regulation Laws, 1985 Edition.

The Plan includes goals and objectives to be obtained through the planning effort with consideration given to the following: land use and community land resources; socio-economics; housing needs; the transportation network; utility and service areas; proposed community facilities, and open space, recreation, and conservation areas. The appendix includes results of the Citizens Survey.

The Planning Board was greatly assisted with Master Plan efforts by the Citizens Committee, charged with the responsibility of coordinating the various subcommittees involved, and by the members of 1,500 households who took the time to respond to the Questionnaire Survey.

Today, Derry is a community at the fringe of the Boston Metropolitan area of influence. It is part of the Southern New Hampshire growth triangle and has been experiencing as much growth, if not more than, adjacent communities. Many of the problems related to town growth were indirectly the result of Derry's role in its larger regional setting. The Community Goals Committee and Derry residents believe that two key points of the Plan are: 1) to preserve and enhance elements that have made Derry attractive, and 2) to overcome problems which might be adverse to the goal of retaining the quality of life as it exists in Derry today. The Master Plan sets forth areas of potential development, preservation of its natural resources, thereby providing for population growth, diversification in land use, and the opportunity for an orderly development to complement the Town's past and present role.

While much of the Plan is concerned with the 11,323 acres that are still undeveloped, the re-use of public and private land resources, particularly in the central area, is also addressed. A key element in this Master Plan is the proposed Land Use Plan which will serve as a basis for the new zoning ordinance. The Land Use Plan is structured on an inventory analysis from existing land use patterns, the soils and their capabilities in accommodating development, the community's topography, and general building and environmental conditions.

Also reflected in the Plan are transportation and community facility considerations, the availability of utilities, and the need for new services based on economic opportunities and population growth projections. It is the Land Use Plan that is the key in providing for an orderly future development.

Derry's role has changed since the formulation of its 1965 Master Plan, when the shoe industry was still the community's primary economic resource. Today, Derry's largest significant resource is its land area. This

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community asset is in need of protection under public covenant, in order to allow for continued public health, safety, and welfare in a community which is undergoing rapid change. In addition to making provisions that accommodate housing growth and meet the demands resulting from economic growth, this Master Plan sets forth recommendations for development of recreation, conservation and open space areas, and identifies areas and resources that are important to be preserved as natural areas.

A new traffic circulation plan sets forth recommended street and highway classifications, allowing for an orderly circulation pattern that will, over a period of 10-20 years, improve convenience of travel and enhance the safety of highway travelers.

This comprehensive Master Plan serves as a basis for present and future implementation. The Town Council has authorized the preparation of a new zoning ordinance, Capital Improvement Program, Capital Budget for financial implementation of the Plan, review and revisions of the Town's site plan regulations, subdivision regulations and other appropriate implementation measures to provide for the orderly development of Derry. These measures have been authorized to ensure that the Master Plan will be used as an important tool in the future growth and change of the community.

This Master Plan includes, among other discussions, the following statutory requirements:

- I. A general statement which shall include such topics as the objectives, principles, assumptions, policies and standards upon which the constituent proposals for the physical and socio-economic development of the municipality are based.
- II. A land use section which takes into account natural conditions and which shows the existing conditions and the proposed location, extent, and intensity of future land usage.
- III. A housing section which analyzes existing housing resources and addresses future housing needs.
- IV. A transportation section showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality.
- V. A utility and public service section analyzing the need for and showing the present and future general location of existing and anticipated public and private utilities, their supplies and distribution and storage facilities.
- VI. A community facilities section showing the location of, type, and need for educational or cultural facilities, historic sites, libraries, hospitals, fire houses, police stations and other related facilities, including their relation to the surrounding areas.
- VII. A recreation section which shows existing recreation facilities and which addresses future recreation needs.
- VIII. A conservation and preservation section which may provide for the preservation, conservation, and use of natural and man-made resources.
- IX. Appendices or separate reports where appropriate which contain the underlying scientific and statistical data for the master plan and its constituent elements.

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TOWN OF DERRY, N.H. Planning Board

October, 1986

Dear Residents of Derry,

As a result of the authorization by Town Meeting in 1984-1985, the Planning Board has developed a comprehensive Master Plan that is designed to chart the course for our town's growth. The projections in this plan are the foreseeable future and envision changes through the year 2000. In preparation of this Master Plan study, the Board was assisted by its professional consultant, Hans Klunder of Hans Klunder Associates, Hanover, NH.

The Plan inventories our man-made and natural resources, which were analyzed and studied as part of the planning effort. While information was being gathered, many of us participated by filling out the Citizens Questionnaire Survey and furnishing important input. With these studies at hand, the planners proceeded to formulate recommendations. Finally, guidelines and proposals for future growth and improvement were developed by the Board and are contained in this Master Plan.

We hope that you will study this document, and give us your continued thoughts, input and support when the time comes for necessary implementation measures before the Town Council. The following pages are but the Master Plan, and as such are designed to guide our future development. If we are to protect and preserve our community in light of continuing growth and change, such orderly development must be in accordance with the Plan, as well as the Town's bylaws and regulations. The Planning Board will submit such measures to the Mayor and Town Council for their consideration and action.

I have enjoyed working on this important part of our community's progress, and I wish to thank everyone for the support they have given in our planning efforts.

Sincerely yours,

Chul Cole

Robert Cole Chairman



WHEELER PROPESSIONAL PARK & BOX 105 HANDVER MEW HAMPSHIRE & (603) 643-3496

October, 1986

Robert Cols, Chaleman Planning Board Town Offices Derry, NH 83838

Dear Mr. Cole,

In March, 1985 the Town of Derry authorized Phase I of their Comprehensive Plan. Subsequently, in 1986, Phase II was authorized. Now Hans Klunder Associates is pleased to submit the comprehensive Master Plan to the Town of Derry.

It is our sincere hope that this Master Plan will be the foundation for future community decisions by the Town Council, the Citizens Board and Town Departments. The Master Plan sets forth recommendations that are designed to provide for the orderly growth for Derry, and is prepared in accordance with them Hampshire Enabling Legislation for Municipalities.

In addition to the Master Platt deciment, Index separate cover, implementation recommendations, which include a new zoning ordinance draft. Capital improvement Program/Capital Sudget and suggested improvements on other implementation measures have been developed and submitted to the Town.

Throughout the period of preparation, members of the Planning Board's Master Plan and Ciffrens Committee spent many hours and greatly sided the development of the Plan. Additionally, citizens input from the Questionnaire was most helpful to formulating plan recommendations and the final document reflects this input. This Master Plan should furnish a sound basis for Derry's new legislative body, its Town Council, in making decisions effecting the future of the Town.

With thanks to all those who have assisted in this task, I am submitting, most respectfully, and Cerry Master Plan.

Hans Khunder, M.C.P.

1985 TOWN OFFICERS

H. Robert Kling

Board of Selectmen Edward Anderson, Chairman Janet Conroy May Casten

Richard Buckley

Administrative Secretary (to Board of Selectmen) Sandra Newton

Receptionist

Carolyn Blasi

Town Treasurer David Buffum

Tax Collector JoAnne Maurice

Brenda Sullivan, Deputy

Mary Sheridan, Clerk

Town Clerk Cecile Hoisington

Deborah Smith, Deputy

Marjorie Swanson, Clerk

MacGregor Library Trustees

1986

1987

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John D. Cadieux

Thomas Bissett Walter A. Pillsbury

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David Doran

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Growth Management Subcommittee

Cecile M. Cormier, Chairman Betsy Daniels
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Barbara Gornell

Carolyn Dixon Tom Keefe Ken Gould

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Cultural SubCommittee

Caryl Carle Nancy Murdock Richard Carle

Eileen Kandel Cynthia Petry

Historical District SubCommittee
Ralph Bonner and Don Houston, CoChairmen
Francine Nicholson Grant Davis Marion Houston

Historical Planning Consultant Lynne Emerson Monroe

Recreation SubCommittee

Emilio Marianelli, Chairman

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for

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Alike Myers Edwin Singesen

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1986 TOWN OFFICERS

Mayor

Paul Collette

Town Council

Richard Buckley Michael Compos Scott Gerrish Frederick A. Tompkins

Maurice Desforge Phyllis Katsakiores

Planning Board

Robert Cole, Chairman
Paul Collette, Mayor

James Cote, Administrative Member
Carmello Napoli Frederick A. Tompkins

Robert Newell Kathryn Aranda Hugh T. Lee

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Mary Ann Edman

Community Goals SubCommittee

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Town Administrator

Craig W. Bulkley

Director of Public Works

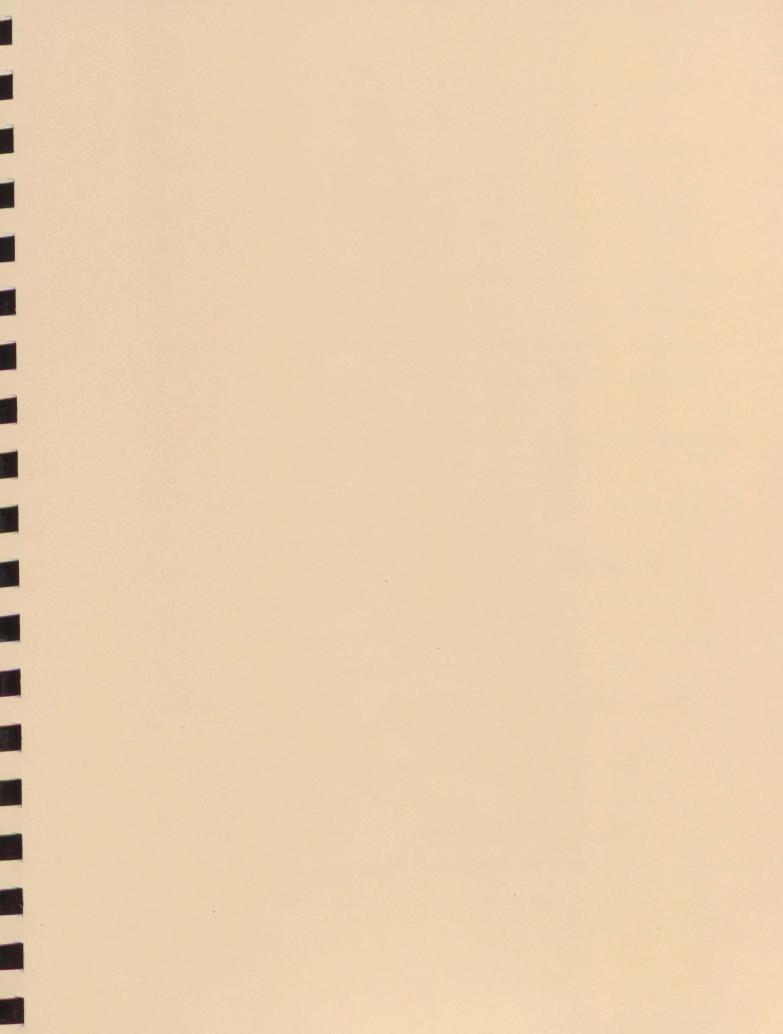
Rodney A. Bartlett

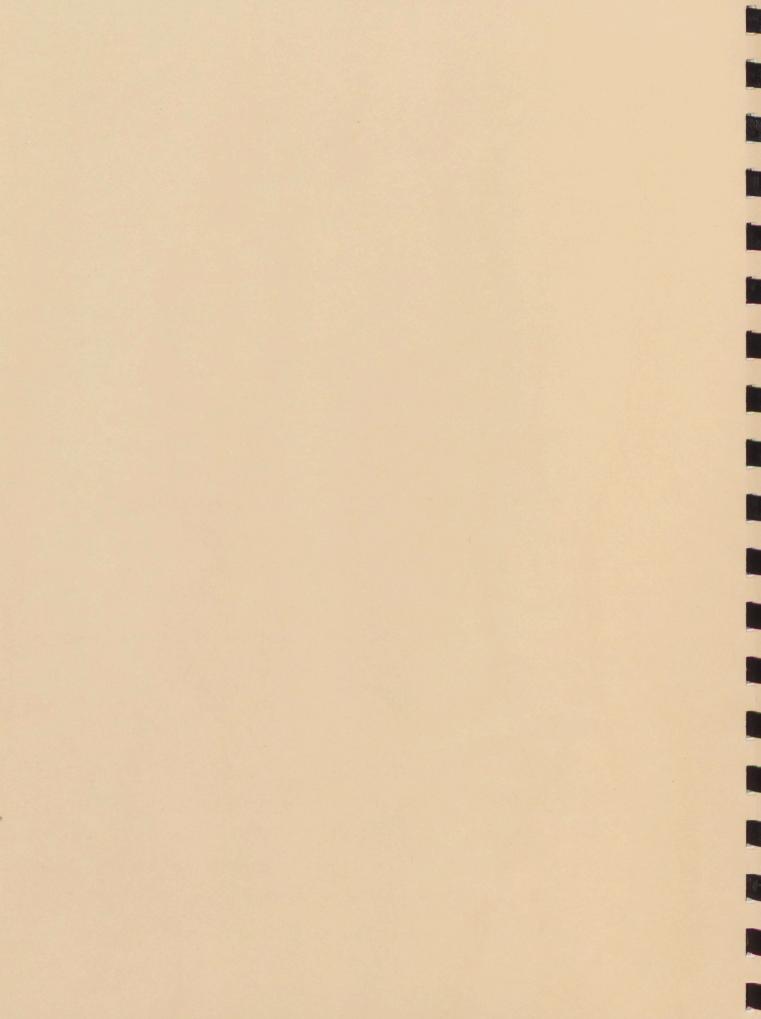
Building Inspector

Fred L. Piper

Town Planner

George Sioras





1986-2000

COMMUNITY GOAL 1: Plan and Coordinate Community Development.

Recommended Policies:

- 1. Adopt a Master Plan by the Planning Board that is designed to give direction to the community for the balance of this century.
- Adopt ordinances and measures, including a Capital Improvement Program by the legislative body, that will implement the Town's Master Plan recommendations.
- 3. Focus on development so as to enhance the living and employment environment in the Town of Derry.
- 4. Provide in the Planning Board schedule for periodic review and citizen input in the Master Plan's realization.

COMMUNITY GOAL 2: Retain a 'Small-Town' Character for Derry.

- Cultivate, through private and public efforts, a sense of community and belonging.
- 2. Promote citizen participation in the community's growth and change.
- 3. Develop a Master Plan that identifies neighborhoods and their focal points to emphasize community and neighborhood groups.
- 4. Provide proper planning and implementation measures that are designed for the preservation of the scenic qualities and historic buildings and landmarks in the Town of Derry.

1986-2000

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- Provide proper plansing and implementation measures that are designed for the preservation of the scenic qualities and historic hulldings and landmarks in the Town of Derey.

- 5. Support the Historic District Commission's efforts for historic preservation.
- 6. Seek State participation in acquisition of development rights on farmlands.
- 7. Establish a scenic road classification and protection measures for such roads in the Town.

COMMUNITY GOAL 3:

Provide for a Prosperous, Diversified Economic Base.

Recommended Policies:

- Enhance present community assets, such as the downtown area and the Industrial Park.
- 2. Establish an Economic Development Department.
- 3. Promote and coordinate economic development efforts.

COMMUNITY GOAL 4:

Develop a Master Plan that Achieves a Balance Between the Natural and Man-Made Environment.

- 1. Develop, with the Master Plan, a program that allows growth and change to take place in harmony with Derry's natural and historical resources.
- 2. Develop an open space program with plans that can be implemented through various means of acquisition of development rights. This would include outright purchase, dedication of easements, dedication of development rights, acquisition of development rights, and the incorporation of open space reserves.

- Support the Historic District Commission's efforts for historic preservation.
- Seek State participation in adquisition of development rights on farmismos.
- 7. Establish a scenic road classification and protection measures for such roads in the Town.

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COMMUNITY GOAL 5:

Provide, through the Master Plan, for recreational and educational opportunities for all ages.

Recommended Policies:

- 1. Formulate plans and capital funding schedules to meet the educational, recreational and park needs of the community now and in the future.
- Coordinate the use of school and town recreational facilities, where appropriate.
- 3. Seek to assure the continuation of the high quality of education provided in Derry.

COMMUNITY GOAL 6:

Create a Balance of Diversified Housing.

Recommended Policies:

 Provide for a plan that will create opportunities for all social and economic levels of society to obtain balanced and diversified housing.

COMMUNITY GOAL 7: Encourage programs that:

- Provide for good schools, open space, and good roads.
- Create an atmosphere of cooperation between the private sector and the community by rendering appropriate services supported by public policies and actions.

Recommended Policies:

1. Develop a Capital Improvement Program/Budget that will assure the availability of funds to support all levels of governmental services and needs throughout the balance of this century.

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 Create an atmosphere of cooperation between the private sector and the community by rendering appropriate services supported by public policies and actions.
- Develop a Capital Improvement Program/Budget that will assure the availability of funds to support all levels of governmental

 Encourage Town Administrators and Planners to provide a program and services that responsibly deal with the service needs resulting from the Town's increased growth.

COMMUNITY GOAL 8:

Create a Regional Setting for Community Plan Realization.

Recommended Policies:

- Borrow on regional and state resources that may be available to the Town of Derry.
- 2. Share and cooperate with neighboring communities in the development of regional facilities.
- 3. Resolve common problems predicated on the convenience and cost advantage of the residents of Derry and the surrounding communities. (These would include programs such as solid waste disposal, sewage, water, roads, and recreation.)

COMMUNITY GOAL 9:

Provide for Safe, Convenient Travel in the Town of Derry.

- Develop a Plan that classifies roads designed to serve the traffic needs of the community.
- 2. Provide for an orderly priority program to improve the road network for the attainment of this goal.
- Develop a road network that is designed to serve the transportation needs of Derry.
- 4. Encourage intercommunity efforts to seek State support for highway improvement programs.

COMMUNITY GOAL 10:

Support and Revitalize Downtown Derry.

Recommended Policies:

- Encourage public and private efforts to revitalize downtown
 Derry.
- 2. Encourage the development of architecturally compatible themes.
- 3. Identify and preserve historically significant buildings and sites as part of the downtown revitalization effort.

The foregoing statement is respectfully submitted for the Planning Board's consideration by the Community Goals Committee.

Maurice Desforge

Donald Irwin

Dave Brown

Pastor Ronald Turner

Grant Benson

Conrad Quimby

Ralph Bonner

Richard Carle

Edward Cooper

Jim Lannan

COMMUNITY COAL 18

Support and Revitalize Downtown Derry Rocommended Policies:

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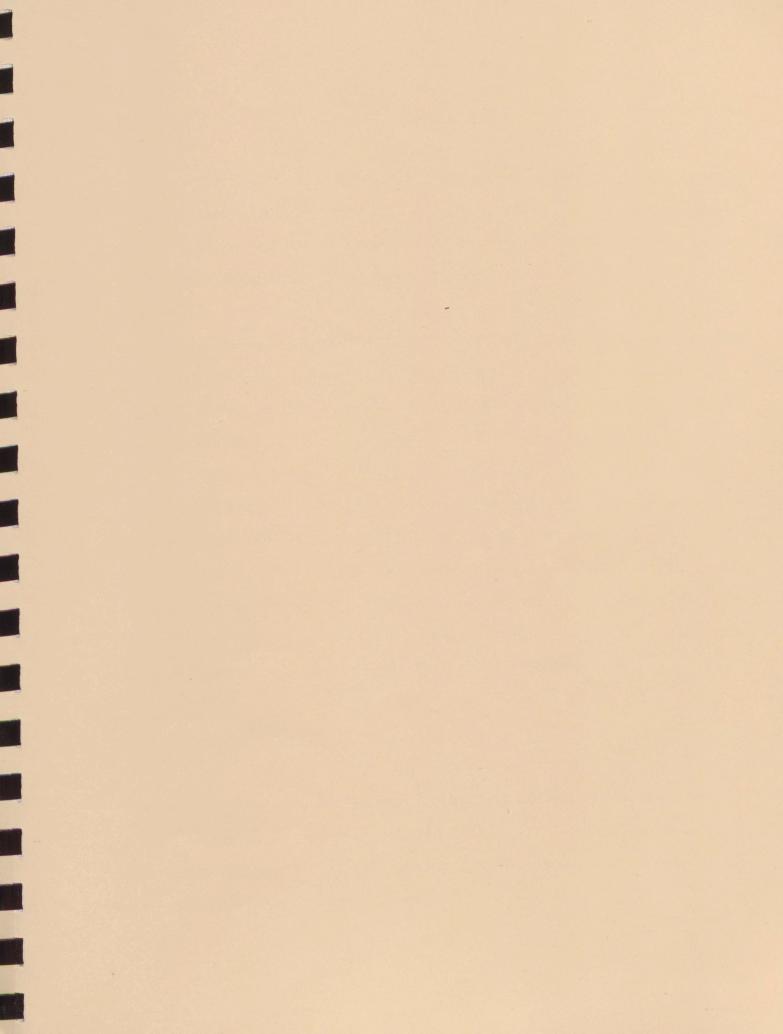
Ralph Bonner

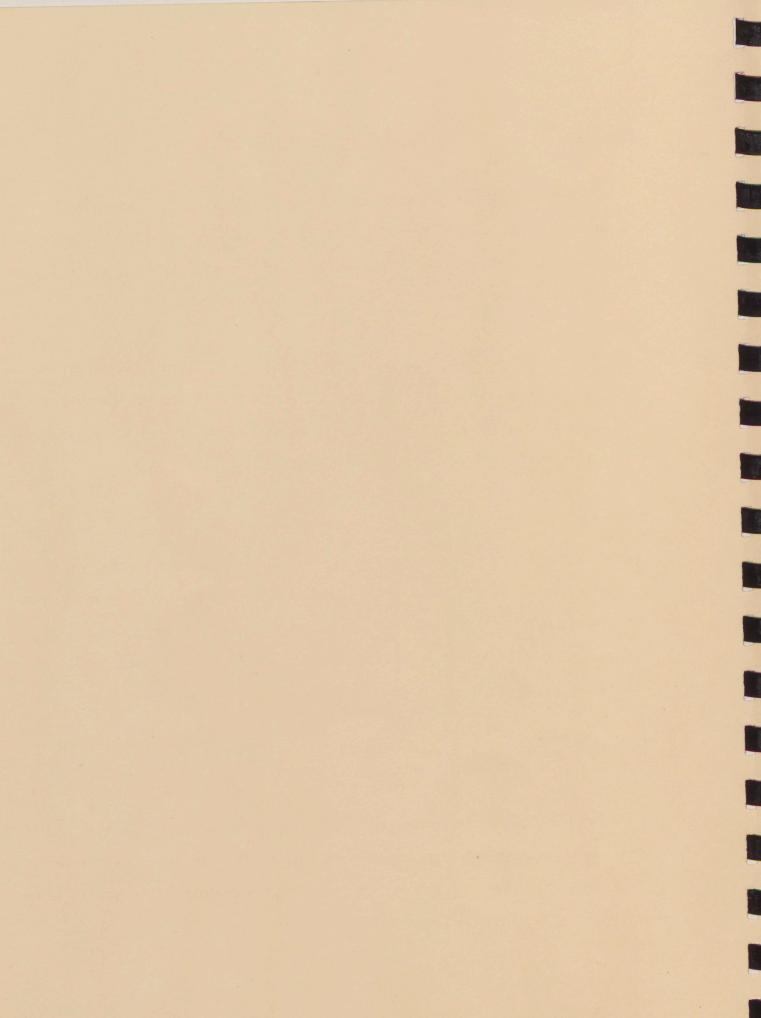
Hickord Corte

Edward Cooper

mannad wil

Linday Janes





The Town of Derry's most significant resource is its land area of 35.6 square miles (or 22,784 acres). Use of this land is subject to community decision which, in turn, is influenced by regional and state impacts. These decisions are a key element to community growth and change.

Derry has evolved from a manufacturing community accessible by rail-road to a residential/suburban type of location. Much of Derry's consumption of land areas has been influenced by regional (not local) employment opportunities.

The development pattern in the last twenty-five years has been one accommodating the housing market, with Derry residents commuting to larger regions, as far as forty-five miles distant. Before Derry can decide on measures to protect its resources and provide for development, it is essential to identify the present use of land areas, what should be protected, what could be developed, and to what density.

1. Residential Land Use

Of the 5,210 residential acres consumed today, approximately 4,726 acres contain single family year-round homes with few seasonal residents.

Two-family residential homes consume approximately 381 acres while multi-family housing consumes 103 acres.

The Town of Derry's most significant resource is its land area of 15.8 square miles (or 22.78% acres). Use of this land is subject to community decision which, in turn, is influenced by regional and state impacts. These decisions are a key element to community growth and change.

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Two-family residential homes consume approximately 381 acres while multi-family housing consumes 103 acres.

Derry's single family home development has taken place throughout the entire community, with developments taking place near the Hampstead line, near the Auburn line, the Chester line, near Salem, near Windham, and in East Derry—in short, anywhere there appears to be a plot of land for sale that is suitable for development. This appears to be an expensive way to grow, both financially and environmentally. Housing seems to be accommodated at the expense of the community's resources, its land, transportation, utilities, and last but not least, orderly development.

2. Commercial Land Use

While residential uses have grown five-fold since 1965, commercial land use has merely doubled to 185 acres. Commercial use generally supports residential growth for the local market supply as well as the larger regional market. Derry has fallen short in having commercial growth commensurate with residential growth.

3. Industrial Land Use

Industrial development has increased to a current use of 111 acres. That is less than a 20% increase since 1965 and has not kept pace with the vast growth in residential land use. Since it is a measure of employment opportunities available locally, Derry's residents have had to rely on jobs elsewhere which is not considered a sound development pattern.

Derry's angle tently home development has taken place throughour the entire community with developments taking place near the Hampeteed line, near the Auburn line, the Chester line, near Salem, near Windham, and in fest the Auburn line, the Chester line, near Salem, near Windham, and in fest Derry—in short, anywhere theirs appears to be a plot of land for sale that is suitable for development. This appears to be an expensive way to grow, both financially and serviconmentally. Housing seems to be accommodated at the expense of the community's resources, its land, transported on utilities, and lest but not likely, orderly development.

Commercial Land Use

While residential uses have grown five-fold since 1965, commercial land use has merely doubled to 185 acres, Commercial use generally supports residential growth for the local market supply as well as the larger regional market. Derry has fallen short in having commercial growth commensurate with residential growth.

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4. Public Land Use

In 1965, 323 acres were devoted to public use. Today Derry has under its auspices the use of 510 acres, some of which were acquired through the Conservation Commission. This is far short of the established goal of 1,270 acres set 20 years ago in the 1965 Master Plan.

5. Semi-Public Land Use

Semi-public land use, for cemeteries, churches, Pinkerton Academy, the Boys Club, etc., involved 152 acres in 1965 and today has expanded to 385 acres. What is significant is that these 385 acres are essentially tax-exempt properties. However, the Town does not gain any tax revenue or income from these properties through forest yield practices, land management efforts, or other public use.

6. Rights-of-Way Land Use

There are 1,256 acres devoted to rights-of-way for utilities, roads, and former railroads. Of these, approximately 322 acres are power line rights-of-way, while roads, highways, and former railroad rights-of-way consume the other 934 acres.

In 1965, 323 screet were downted to public use. Today Derry has under its auspices the use of 510 acres, some of which were acquired inrough the Conservation Commission. This is far short of the established oal of 1,370 acres set 20 years ago in the 1965 Master Plan.

5. Semi-Public Land Ties

Semi-public land use, for caffedories, churches, Plakerton Academys the Boys Club, etc., involved 152 acres in 1965 and today has expanded to 365 acres. What is significant is that these 335 acres are essentially tax-exempt properties. However, the Town does not gain any tax revenue or income from these properties through forest yield practices, land management efforts, or other public use:

Rights-of-Way Land Use

There are 1,256 acres devoted to rights-of-way for utilities, roads, and former retroads. Of these approximately 322 acres are power line rights-of-way while roads, highways, and former retroad rights-of-way consume the other 934 acres.

7. Flood Plains and Wetlands

Flood plains are identified in accordance with the Department of Housing and Urban Development ("HUD") Insurance Management Program's designation of these areas. These land areas should be protected from development. In Derry this land area measures 2,801 acres.

Similarly, wetlands consume 1,127 acres in the Town of Derry and, combined with flood plains and flood ways, total over 3,900 acres that should be undisturbed by human settlement. Neither should these areas be filled in or otherwise taken out of the natural resources inventory for the community.

8. Forest and Open Space Land Use

There are 1,691 acres of open land areas identified from aerial photographs as fields, pasture lands, orchards, etc.; and there are 9,122 acres of forest land. Together, this totals 10,813 acres in the Town of Derry left for developmental purposes. Some of this acreage includes farmlands and second growth forests.

9. Water Area

The water area in Derry equals 386 acres. This has not changed since earlier studies done in 1965.

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The water erea in Derry equals 386 acres. This has not changed since earlier studies done in 1965.

Summary

Derry today is using 7,657 acres for development purposes. This includes rights-of-way, public lands, commercial/industrial, residential and semi-public land. In addition, 3,928 acres are identified as flood plain and wetland areas; and 386 acres, as water areas. This amounts to a total of 4,314 acres of 'unuseable' land area. The grand total of land acreage not readily useable for development comes to 11,971 acres, of which 810 acres are proposed for public purposes.

Comparing 1965, when approximately 20,437 acres were vacant, with 1985, when 15,128 acres were vacant, the Town has consumed its land area at an average of 265 acres per year. Were this trend to continue, Derry's land area would be consumed in approximately thirty-five years, assuming the present rate of growth. Considering that thirty-five years is approximately one generation, Derry today must plan how best to utilize its land areas. This means identifying those areas that should not be developed, identifying those areas that should have high priority for development, identifying those areas that should be low priority for development and, identifying the densities of development which should prevail in each of these areas.

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Comparing 1965, when apprecianately 10,437 acres were vacant, with 1865, when 15,128 acres were vacant, the Town has consumed its land area at an average of 165 acres per year. Were this trend to continue, Derry's land area would be consumed in approximately thirty-five years, assuming the present rate of growth. Considering that thirty-five years is approximately one generation. Derry Today must plan how best to utilize its land areas. This means identifying those areas that should not be development, identifying those areas that should have high priority for development and, identifying those areas that should be low priority for development and, identifying the densities of development which should prevail in each of these areas areas that should be low priority for development and, identifying the densities of development which should prevail in each of

TABLE I

LAND USE IN DERRY

1985 (Approximate Acreages)

Residential:	
4,726 Acres - Single Family (incl. Seasonal)	
381 Acres - 2 Family 103 Acres - Multi-Family	5,210 A.
Commercial	185 A.
Industrial	111 A.
Public	510 A.
Semi-Public	385 A.
Rights-of-Way:	
322 Acres - Utilities 934 Acres - Roads/Highways	1,256 A.
	2,801 A.
Flood Plain	1,127 A.
Wetlands	1,127
Open (Fields, Pastures, Orchards)	1,691 A.
Water	386 A.
Multi-Residentia 379	9,122 A.
Forest Land	Acres
TOTAL	22,784 A.

Source: 1984 Aerial Photography, 1985 Field Survey.

TABLE

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Floor Blate

Once (Stolete Beauty and Alleria) confi

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Forest Land 9,122 A.

22.784 A

TABLE 2

COMPARISON OF LAND USE DATA, 1965, 1975, 1985

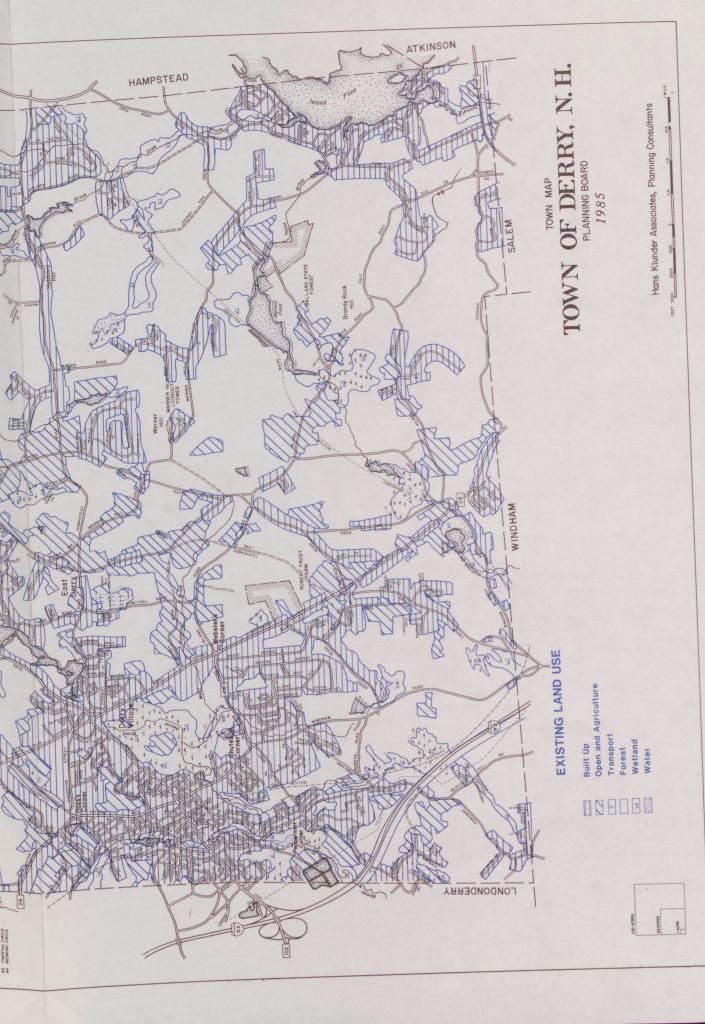
Land Use Category	1965 Data Acres % Tot.		1975 Acres	Pata % Tot.	1985 Acres	1985 Data Acres % Tot.		
Residential (all)	925	4.1	3,540	15.54	5,210	22.9		
Commercial	95	0.4	142	.62	185	.8		
Industrial	92	0.4	96	.42	111	.5		
Public	323	1.4	340	1.49	510	2.2		
Semi-Public	152	0.7	1,200*	5.27	385	1.7		
Utilities & Streets	760	3.3	938	4.12	1,256	5.5		
	20,437	89.7	16,528	72.54	15,127	66.4		
Vacant	22,784	100.0	22,784	100.00	22,784	100.0		
TOTALS	22,10.							

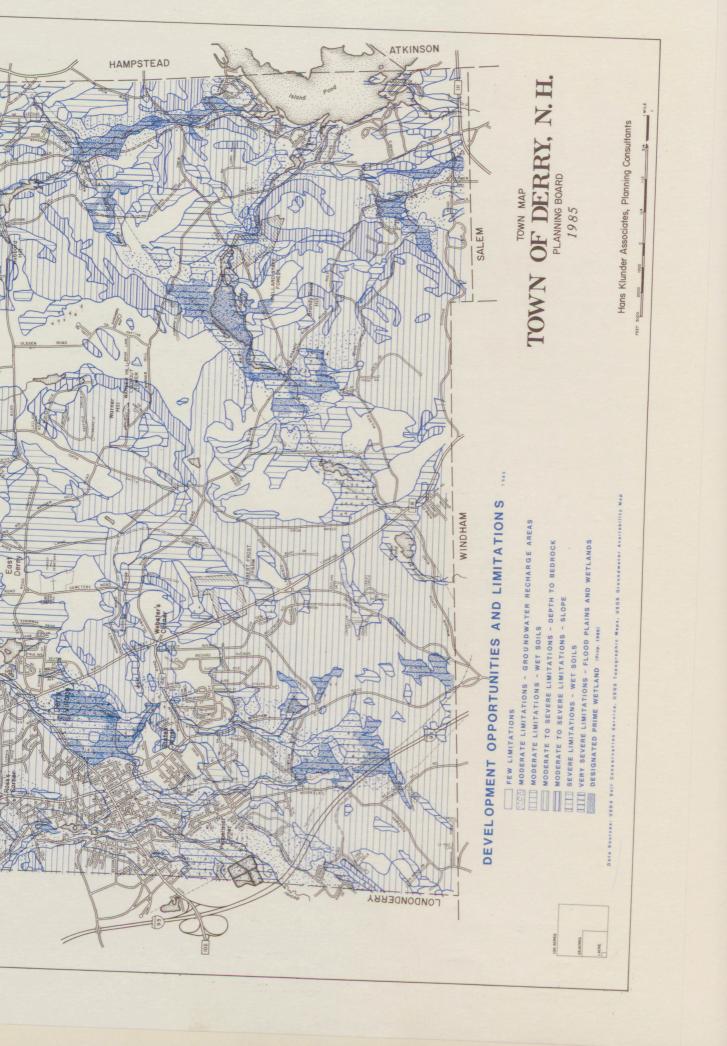
^{*}This figure is taken from the 1975 Town Plan, and appears questionable.

TABLE 3
PRESENT ZONING DISTRICT ACREAGES

Industrial	897 Acres
Retail Business	581 Acres
Multi-Residential	379 Acres
Mobile Homes	32 Acres
Residential	20,895 Acres
TOTAL	22,784 Acres







C. PROPOSED LAND USE

Introduction

The land use plan for the Town of Derry is a policy, stated in text and map, for the future use of the land resources in the community. It serves as a guide for the Planning Board and public officials, as well as private citizens, in their efforts to determine the Town's future. Once adopted by the Planning Board, the land use plan forms the basis for a revised zoning ordinance. It is the zoning ordinance which should be the tool, under New Hampshire Enabling Legislation, that assures future orderly development in Derry.

The land use plan makes provision for protecting open land (land <u>not</u> to be developed). It shows generalized sites to be acquired and placed under public domain for public purposes. Therefore, the land use plan is a more generalized statement, with map, that reflects the Planning Board's recommendations to the Town Council through inclusion in the Master Plan. These recommendations ultimately serve as a basis for Town legislation to protect the community's land resources and to provide for orderly development.

The existing land use and present infrastructure provided by the community and private development were considered and projected into the future for most appropriate use of the community's land resources. In addition, the land use plan reflects Derry's ability to provide services for its residents and businesses, now and in the foreseeable future. The land use plan has incorporated water and sewer areas now being serviced and taken into consideration those areas where continued improvements in the near future will

take place. This will enlarge the service areas and the quality of services within those areas.

The plan takes into consideration Derry's role as a residential community that is beginning to assume regional proportions as a shopping and employment center. It is a plan that provides for reasonable growth patterns, taking into consideration various elements that should and will influence orderly development and, at the same time, provide for the use of land in accordance with its natural features and limitations in such a way as to benefit the entire community and provide for the necessary urban services at a reasonable cost. Additionally it anticipates community-wide needs.

The land use plan takes into consideration the community's natural resources, which includes the land's capability based on soil and subsoil conditions, its natural features such as hills, lakes, wetlands, major drainage basins and year-round streams.

The land use plan also takes into consideration the Town's road network, existing and proposed. The plan includes utilities, such as sewer and water, and waight the demand for development placed in this region upon Derry.

Moreover, the adequacy of community services and facilities, as well as the Town's public buildings and their adequacy, have also been considered.

The residential portion of the land use plan shows reasonable population projections to allow for an increase of 15,000 by the year 2000.

The land use plan proposal clearly sets forth the concept that "Not all land is equally suitable for development." Therefore, areas have been identified for early development, and others, for delayed development. Both will allow the community to provide services necessary to enjoy the amenities of "small-town" living. Therefore, until such time as the community is able to improve its transportation network, increase its community services, provide for adequate municipal facilities, i.e., recreation, town offices and educational facilities, this land use plan curtails overdevelopment in the outlying portions of the Town of Derry.

The Planning Board should continuously review the plan, make any appropriate changes it deems necessary in light of community conditions, rather than politics. This plan and any updates must set forth, in essence, the most appropriate use of land, keeping orderly development foremost in mind, and subject to future review and update in light of man-made changes both within the community and outside.

The proposed land use categories are identified on the following pages and on the map entitled "Proposed Land Uses".

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The proposed land use categories are identified on the following

1. Rural Residential Uses

The Town designates those areas remote from community services as "Rural Residential". It is these areas that, in the past, have been relatively undeveloped, inaccessible to municipal services (sewer, water), remote from education facilities, fire protection, police protection and poorly serviced by Derry's transportation network. The rural residential areas are recommended for delayed development at a density no greater than 1 dwelling unit per 3 acres.

In addition to being areas remote from municipal services, the Rural Residential areas are generally less suitable for higher density and residential development for reasons of topography and subsoil conditions and have been set aside as those areas most rural and forested in Derry today.

2. Low Density Residential Uses

While closer to community services than the rural designated areas, but still remote, the low density residential areas do not readily lend themselves to a density beyond 2.0 acres per dwelling unit where there is "on-lot" sewer and water services and slightly higher density where there is "off-lot" sewer and/or water services. It is an area that is more accessible to main roads; has slightly better access to community services, education, police protection; and, based on natural environmental conditions (soils, subsoils, etc.), is more suitable for earlier development than Rural Residential areas.

3. Medium Density Residential Uses

A 1.5 acre per dwelling unit area designation for medium density residential use is established. These are areas that surround those portions of the community now serviced with municipal services of sewer and water and are still sufficiently remote from the urban area. A higher density residential is discouraged here, while a density commensurate with municipal ability to provide services is established. A transportation network that provides an orderly flow of traffic will bring in line one needed municipal service through a highway program that meets present demands.

4. High Density Residential Uses

Recognizing the continued need for residential growth, there is a high-density residential area established surrounding Derry's urban core. These areas are readily accessible to community services, such as recreation, education, state highways, shopping, and employment opportunities.

In these areas 15,000 square feet are required per dwelling unit in order to allow for the orderly development of this urban-fringe area and its necessary community facilities.

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5. Neighborhood Commercial Uses

Commercial services generally associated with the needs of the neighborhood are provided in the "Neighborhood Commercial" areas. These districts are located strategically throughout the community and should be designed in a manner providing convenient shopping opportunities for residents of segments of the community and visitors. The districts are designed to promote the present residential functioning of the neighborhood, retain its character and yet, provide a shopping environment needed for the convenience of residents in the locale.

It is recommended that neighborhood stores and services be limited in size to no more than 2,000 square feet of building space, and that such commercial districts be provided within a $1\frac{1}{2}$ mile radius of the neighborhood centers, and be implemented through a "floating zone" concept.

6. Central Area Uses

The central area district is presently identified in the Town's zoning ordinance under the "Retail Business/Multi-Family Residential" designation. The area is bounded by a line just south of South Avenue, to the east by Birch Street and Crystal Avenue, to the north by Rollins Street and Lenox Road, and to the west by Maple Street as defined by the existing zoning ordinance. The central area includes much of Derry's early shopping facilities and is associated with West Derry at the turn of the century. Since that time it has adapted to contemporary use while other locations remain stagnant and not always in keeping with a central area setting.

The community goals identify this area as the focal point for the service and retail industry, recapturing and retaining Derry's "small-town" atmosphere. The Land Use Plan recognizes the asset this area provides to the community, as well as its need for revitalization. Presently it provides an area for commercial business and multi-family residences; in general, surrounding the core of West Broadway.

The Land Use Plan recommends the implementation of the downtown plan prepared by and adopted by the Town earlier in conjunction with the acquisition of the B & M railroad property. By implementing such a plan, residential, commercial and service industry uses will provide for a focal point for Derry, not only because of its established function as such over the past years, but because of its association with and accessibility to the Interstate network and adjacent Londonderry.

In bringing about this revitalization, the Town's Plan recommends a special design district designation controlling heights, signs and landscaping in the central area. It also recommends that

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7. General/Commercial Uses

In recognition of the demand created by the Town of Derry and surrounding communities, activities aimed at large-scale retail sales are proposed to be provided. These would be areas designated for accommodating retail establishments serving community and regional needs. They should be located on major traffic arteries and readily accessible to the community and the regional highway network. Their layout design must be controlled, through site plan review standards.

8. Industrial Uses

Presently, the Town of Derry has established a major industrial area of 500+ acres south of the urban complex. Much of the land area has already been developed as Residential. This southern industrial zone has shrunk to a smaller area, much of which is wetlands or only marginally suitable for development. It is therefore recommended that a new industrial area be proposed. This section of the economic development can be accommodated north of the urban complex of West Derry - north of the existing Industrial Park. The new area would bring industrial development in the vicinity of power lines north of Route 28 (Manchester Road), west of Route 28 Bypass (Londonderry Turnpike), and to the southern edge of the northern powerline R.O.W. The area can be serviced with water and should be given a high priority consideration in planning areas for sewage disposal services.

Industrial areas are needed for development of the community's employment opportunities and become an important part of the Town's economic development. The area's ability to reach regional highways and the availability of utilities are a primary consideration. These areas should be devoted to research, development, and other high-density employment activities.

These land areas should be preserved solely for the community's economic development, with installation of utilities and road and highway access suitable for industrial development encouraged by the Town. In reserving these land areas strictly for industrial development, incompatible uses ultimately resulting in conflicts, can be avoided. Future industrial areas should not be diluted by special exceptions and alternate use provisions. A performance standard concept should be implemented through a new, updated zoning ordinance.

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9. Public Land Uses

The land use plan shows, in a generalized way, those areas that should be reserved for future public uses. These uses could include future school sites, a Town Center location, neighborhood playgrounds, areas for recreation, and parks for public enjoyment. The land areas are shown on the Town Plan so that the Planning Board, through proper administration of subdivision regulations, can assure the reserve of land areas for future community needs. It is recommended that the Planning Board adopt these measures in the Land Use Plan as a matter of public policy. This way, land areas will be available as community and neighborhood needs do arise. The recommended size of the areas designated in the Plan is 25 to 50 acres.

10. Open Space/Conservation Uses

Visually, functionally, and psychologically Derry is for the most part, an "Open Space" community. This is the result of some of the farmlands remaining and the retention of large tracts of forested areas. The next step must include preservation of the unique and fragile areas generally identified as wetlands and flood plains.

The Land Use Plan identifies Derry's flood-prone areas, wetlands, and those areas either marginally suitable or totally unsuitable for development. These should be required to remain undeveloped and be incorporated into the review process as land reserves - to be either privately or publicly held for the future.

In addition, the Land Use Plan suggests protecting some of the farm areas still in existence. These would help preserve the community's ever-decreasing open land resource. Preservation could be accomplished through acquisition of development rights, dedication from property owners, or through reservation of these areas from development through the Planning Board. The Plan identifies the farm areas which are generalized at this point. Their location would become more specific as the Planning Board reviews provide for the orderly development of Derry.

11. Office and Professional Uses

Because of the ever-increasing demand for professional and ancillary uses thereto, the Master Plan makes provision for two such areas. One is in conjunction with the Municipal Complex, and the other is in conjunction with the Parkland Hospital. It is envisioned that ancillary uses include banks and restaurants.

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TABLE 5

Proposed Land Use Acreage Distribution*

Designations:	RR	LDR	MDR	HDR	CA	IND	GC	0	TOTAL
Total Acreage**	8,692	6,714	3,780	812	74	747	703	82	21,604
Less: Unsuitable***	2,216	1,007	546	360	0	126	13	4	4,272
Buildable	6,476	5,707	3,234	452	74	621	690	78	17,332
Less: Rights-of- Way, Public & Developed	1,626	1,454	1,560	314	74	108	267	31	5,434
Remaining	4,850	4,253	1,674	138	0	513	423	47	11,898

Legend:

RR - Rural Residential

LDR - Low Density Residential

MDR - Medium Density Residential

HDR - High Density Residential

CA - Central IND - Industrial

GC - General/Commercial

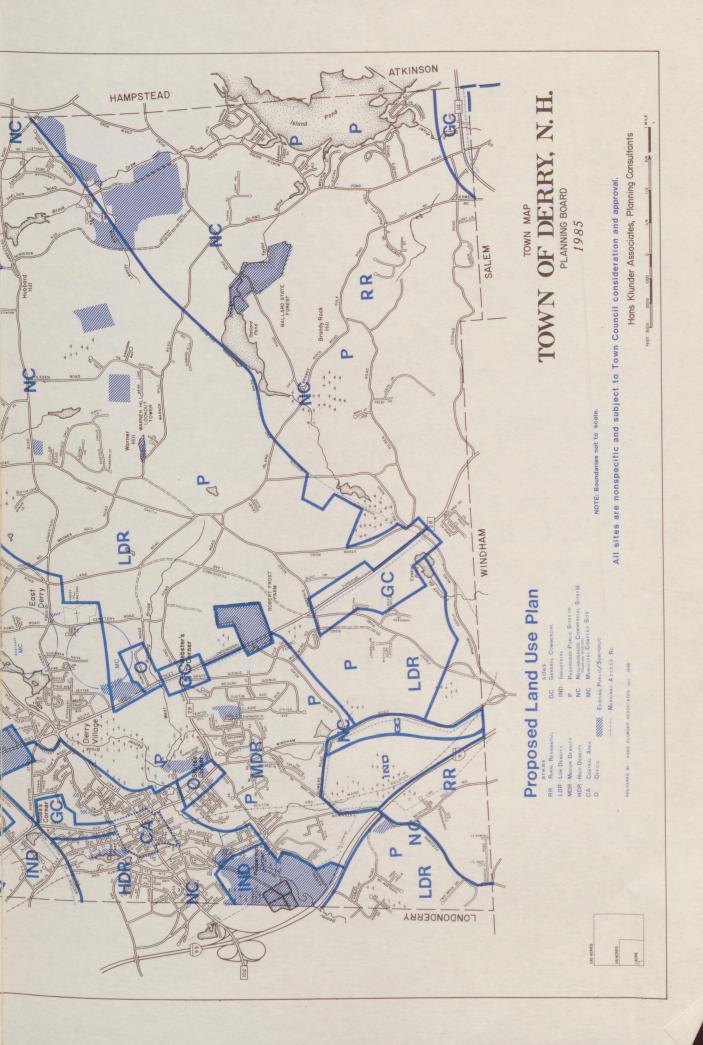
O - Office

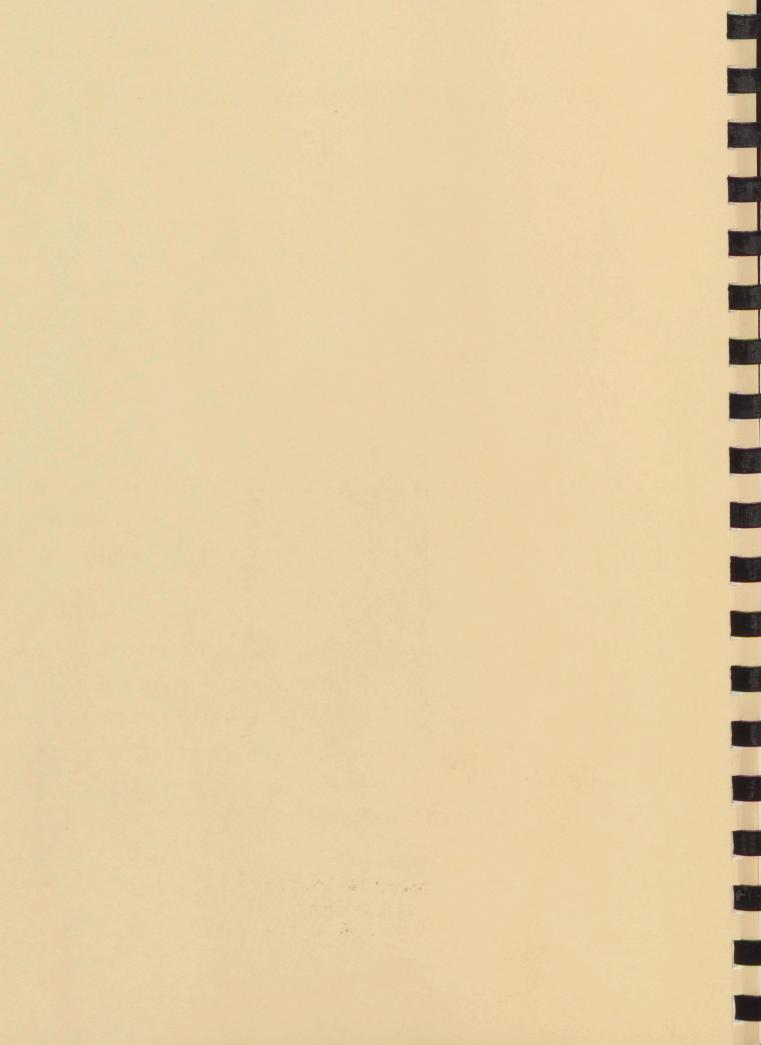
^{*}Does not include 386 acres of water surface, nor 895 acres of existing public and semi-public owned lands; Neighborhood Commercial and Proposed Public are designated sites only.

^{**}Established by planimetric measure.

***Such as wetland and flood plain areas.







A. POPULATION

There are many factors which affect population change in a community. Some influences such as national economic conditions, the lack of taxation, policies to encourage growth by the State of New Hampshire, and geographic proximity to Massachusetts and employment opportunities are out of Derry's control. Some factors, such as a Master Plan to control growth and ordinances to direct growth where the community wants it to be, are within Derry's control.

In past Master Plans, Derry was labeled "a suburban bedroom community". Yet, the Town has many natural and historic amenities that make it an attractive community where people continue to want to work and live.

There is little doubt Derry will continue to grow. National and State trends suggest a slower rate of population growth than in the past. In the Public Opinion Survey, citizens asked for a slower rate of residential growth and an increase in light industrial growth. Derry can help make these desires happen in preferred areas where the environment can support it. In addition, efforts to protect wetlands, lakes, sensitive areas, and historic resources could maintain Derry's attractive character.

> Demy Public Library 62 E. Broadway Derry, N. H. 03038

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1. Population Growth

Derry was settled in 1719 and incorporated as Londonderry in 1722. During the 1700's, the original large tract of Londonderry contributed land to all or parts of Manchester, Hudson, Windham, and Salem, before the current Derry boundaries were established in 1827, by the splitting off of Londonderry. Figure 1 shows historic population change in Derry. Losses in population correspond to periods of agricultural decline, when competition from western agriculture and employment opportunities in mills to the south caused a similar decline throughout New Hampshire. A slight population loss showed in the 1930's. Since 1940 there has been a steady rise in population. There was a sixty-eight percent increase between 1960 and 1970, and a sixty-one percent increase between 1970 and 1980. These dramatic increases were also experienced in many southern New Hampshire communities due to accessibility to Massachusetts and the economic expansions around the Boston-Metro area.

With such dramatic increases in population, Derry absorbed a much greater increase than that experienced by Rockingham County as a whole. In 1960 Derry had only seven percent of the total County population. By 1980 this rose to 10 percent, as indicated on Table 6. Two of Derry's neighbors, Londonderry and Salem, experienced similar exponential growth.

From 1980-1984 the growth rate in Derry slowed considerably, possibly due to national economic conditions, local service constraints on building, and smaller family household sizes. However, the Town still moved from a

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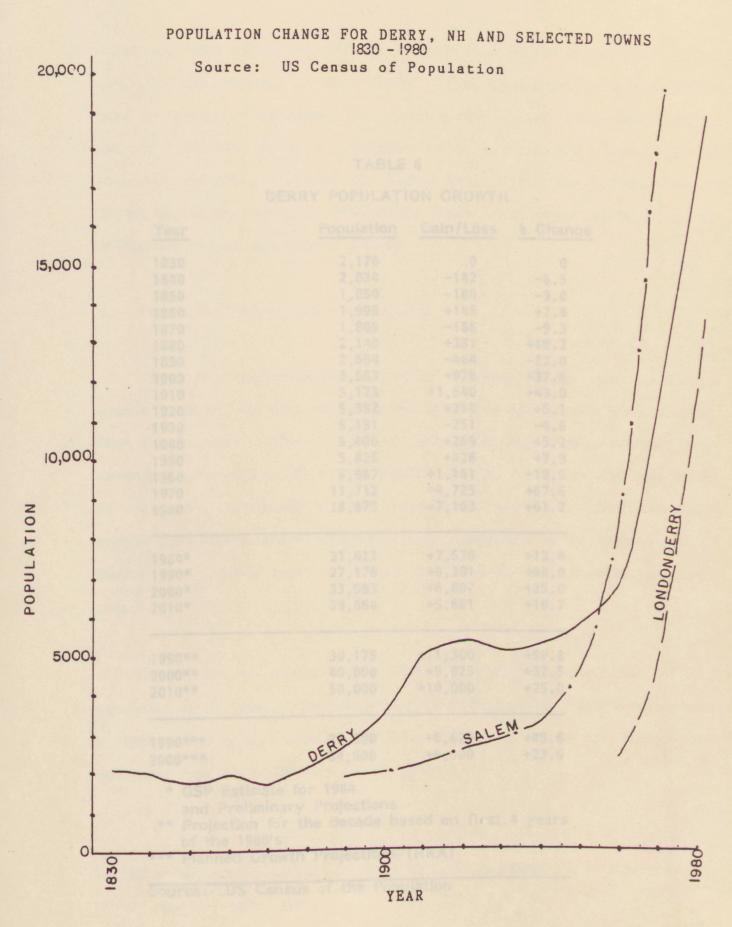


TABLE 6
DERRY POPULATION GROWTH

Year	Population	Gain/Loss	% Change
1830 1840	2,176 2,034	0 -142	0
1850	1,850	-184	-6.5 -9.0
1860	1,995	+145	+7.8
1870	1,809	-186	-9.3
1880	2,140	+331	+18.2
1890	2,604	-464	-22.0
1900	3,583 5,123	+979 +1,540	+37.6
1910 1920	5,382	+259	+43.0
1930	5,131	-251	-4.6
1940	5,400	+269	+5.2
1950	5,826	+426	+7.9
1960	6,987	+1,161	+19.9
1970	11,712	+4,725	+67.6
1980	18,875	+7,163	+61.2
1984*	21,411	+2,536	+13.4
1990*	27,176	+8,301	+44.0
2000*	33,983	+6,807	+25.0
2010*	39,664	+5,681	+16.7
1990**	30,175	+11,300	+59.8
2000**	40,000	+9,825	+32.5
2010**	50,000	+10,000	+25.0
	27 500	10 625	LUE C
1990***	27,500 34,000	+8,625 +6,500	+45.6 +23.6
2000***	34,000	10,500	123.0

^{*} OSP Estimate for 1984 and Preliminary Projections

*** Planned Growth Projections (HKA)

Source: US Census of the Population

^{**} Projection for the decade based on first 4 years of the 1980's

TABLE 6
DERRY POPULATION GROWTH

OSP Estimate for 1984

Projection for the decade based on first 4 years

^{***} Planned Grawtin Projections (HKA)

relatively small community of 6,987 in 1960, to a "City" approaching 19,000 people in two decades. In fact, Derry is fast approaching a population the size of Portsmouth or Salem, the County's two largest communities. Based on the 1980–1986 trend, a population increase of 11,300 people* can be expected by 1990. Further on, Derry should plan for a population of 34,000–36,000 by the year 2000 unless local development management can effectively reduce this rate of growth.

2. Population Distribution - Geographic

The 1965 Comprehensive Planning Program noted that population growth between 1950 and 1960 occurred largely in the Beaver Brook Valley, West Derry, Derry Village and East Derry. At this time, developed area covered approximately 10% of the total land area. When growth intensified in the 1980's, the trend in land consumption continued. Scattered residential subdivisions are in evidence in many locations in the eastern half of Derry. In addition many homes are still outside the sewered downtown areas.

On an overall basis, Derry had a population distribution of 1.1 acre/persons in 1984. This compares to a distribution of 3.3 acre/persons in 1960 and 1.9 acre/persons in 1970. Similarly, acres per family have decreased from 7.7 in 1970 to 4.6 in 1980**.

^{*}Based on an average annual increase of 1,130 persons/year, 1980-1986.

^{**}U.S. Census, 1970, 1980.

POPULATION CHANGE FOR ROCKINGHAM COUNTY TOWNS

Population growth and residential development also resulted in the conversion of land from open space. In 1965, approximately 10% of the land area was developed. By 1982*, 21% of land in Derry was developed. As growth continues, it is important to describe where development can best be accommodated with least expense to Derry when providing services and at minimal or zero impact on the natural environment. The Master Planning process can help Derry accommodate development with community goals and the protection of open spaces which are important to the Town.

3. Population Distribution - Age

Population distribution by age and sex for Derry is shown on page 33. The pyramid indicates Derry has followed national trends with a population that is living longer, and the advent of smaller family size. The late "baby boomers", shown as children in the 1960's, are now of working age. The greater number of people shown between the ages of 25 and 45 also represent an in-migration of child-bearing age families who are taking advantage of employment opportunities in southern New Hampshire and the Greater Massachusetts Metro area. Table 8 shows natural population increase and Figure 2 also supports the conclusion that a high segment of the population is in the child-bearing age group. Community services and improvements should be provided at a time when much of the population is of employable age, rather than elderly or of school age.

^{*}See Existing Land Use Study.

Population growth and residential development also resulted in the conversion of land from open space. In 1965, approximately 196 of the land conversion of land from open space. In 1967, 216 of land in Derry was developed. As developed, the important to describe where development can best be eccuminated with least expense to Derry when providing services and at minimal or zero import on the natural environment. The Master Planning process can help Derry accommodate development with community goals and the protection of open spaces which are important to the Town.

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^{&#}x27;See Existing Land Use Seidy,

TABLE 8

DERRY RESIDENT BIRTHS, DEATHS, AND NATURAL INCREASE (1950-1984)

Year	Resident	Births	Resident	Deaths	Natural	Increase
1950	15	6	95		C1	
1951	14		84		61	
1952	15		74		62	
	14		98		80	
1953	15		70		49	
1954	15		100		88	
1955	15		84		50	
1956	14		83		74	
1957	15		74		59	
1958			72		80	
1959	17				100	
1960	18		88		92	
1961	19		84		112	
1962	16		85		81	
1963	21		98		118	
1964	19		92		99	
1965	21		86		125	
1966	21		87		125	
1967	22		103		121	
1968	22		120		109	
1969	27		107		172	
1970	26		87		177	
1971	30	4	89		215	
1972	29	5	105		190	
1973	27	9	110		169	
1974	31	0	115		195	
1975	31	6	125		191	
1976	33	1	124		207	
1977	31:	2	100		212	
1978	32		109		215	
1979	363		116		247	
1980	393		146		247	
(Subto					(4122)	
1981	410	0	135		275	
1982	414		119		295	
1983	420		118		302	
1984	450		138		312	
1985	407		152		255	
1505		0 0.5. 1	Cennus of	Possint	ton	
					(55.00)	
(TOTA	(L)				(5561)	

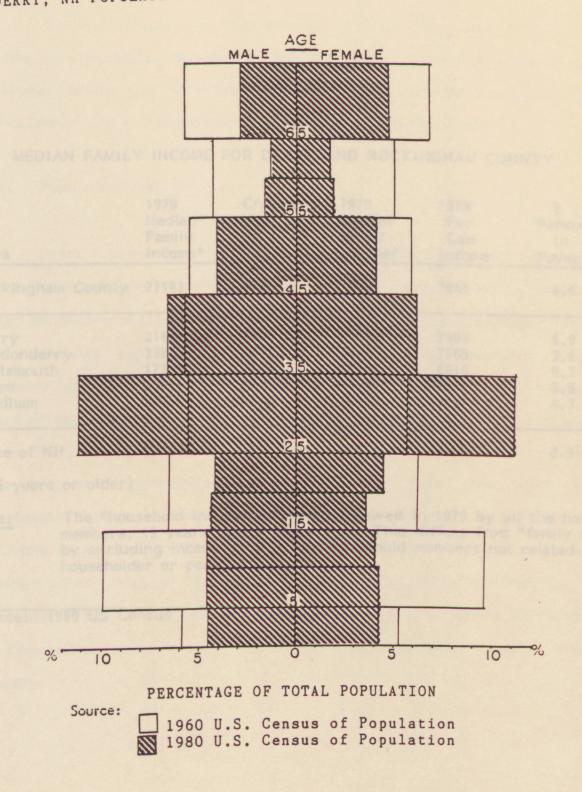
Source: NH Bureau of Vital Statistics

SERRY RESIDENT BIRTHS, DEATHS, AND NATURAL INCREASE

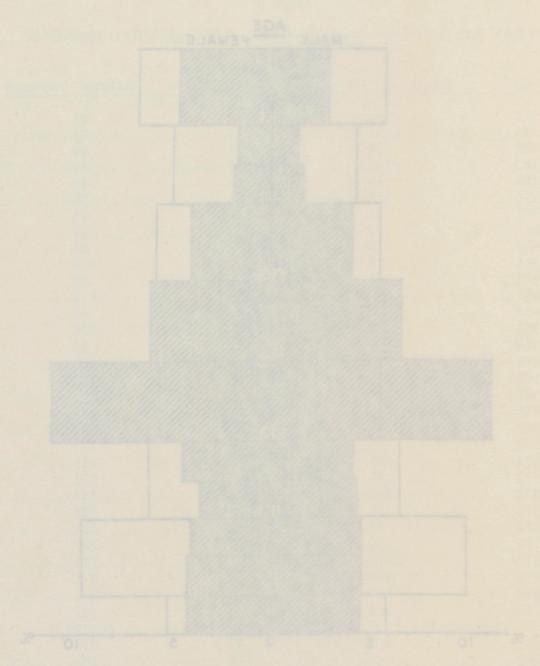
Source: NH Bureau of Vital Statistics

DERRY, NH POPULATION DISTRIBUTION BY AGE AND SEX, 1960-1980

FIGURE 2



DERRY, HE POSULATION DISTRIBUTION BY ACE AND SEX, 1960-1980



PERCENTAGE OF TOTAL POPULATION

1950 U.S. Census of Population

MEDIAN FAMILY INCOME FOR DERRY AND ROCKINGHAM COUNTY

Area	1979 Median Family Income*	Change 169 179 of P.C.I.	1979 Median HHold Income*	1979 Per Cap Income	Persons In Poverty
Rockingham County	21181	4408	18993	7445	6.6
Derry Londonderry Portsmouth Salem Windham	21631 23861 17270 23196 27650	4496 4762 3669 4246 6306	19969 23027 14426 21248 26692	7402 7705 6416 7611 9647	5.9 3.6 9.3 5.6 4.3
State of NH	19723	3981	17013	6966	8.5

^{*(15} years or older)

Note:

The "household income" is income received in 1979 by all the household members, 15 years of age and older. This differs from "family income" by excluding income received by household members not related to the householder or persons living alone.

Source: 1980 US Census

MEDIAN FAMILY INCOME FOR DERRY AND ROCKINGHAM COUNTY"

*(15 years or older)

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The "household income" is income received in 1972 by all the househomembers, 15 years of age and older. This differs from "family income vectoring income received by household members not related to the householder or persons living alone.

Courses 1980 115 Census

Natural increase from 1950 through 1980 for Derry was 4,122 persons. The total population increase in this period is 13,049. The trend toward smaller family size with fewer children per household continued from a household size of 3.3 persons in 1970 to 2.8 persons in 1980*.

4. Population Trends

Derry's population characteristics and trends have many implications for Derry's future planning. A population that is dominated by persons in the childbearing and working years (age 25–45) will make different demands on community services than will a younger or older population. A great number of women in their childbearing years may result in an increasing school population for future years despite a national trend toward smaller families. An older population makes different demands for recreation services and opportunities. Derry's citizens noted the need for a community center, ballfields, skating rink, indoor pool, boat launch, and bicycle trails. In addition, a population largely commuting to work needs better access roads to major highways and improved road maintenance; and commercial/retail enterprises and the central business district may undergo a change in hours and types of services offered to meet resident commuter needs.

^{*}U.S. Census

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^{*}U.S. Census

While the rate of growth appears to have slowed, Derry should still plan for further increases and for the changing demands of the population for services. The designation of areas where growth should occur and discouragement of scattered development will help Derry meet the needs of an expanding population with minimal financial and environmental cost.

5. Population Projections

The 1965 Comprehensive Planning Program projected accelerated growth for Derry – a population of 19,500 by 1985. This estimate for 1985 is lower than the New Hampshire Office of State Planning's 1984 estimate of 21,411 and the Southern New Hampshire Planning Commission's 1983 estimate of 22,471 people and most recent estimates of 25,656 in 1986.

One of the responsibilities of updating a Master Plan is to examine population growth and prospects for the future. Figure 3 shows the accelerated growth rate Derry experienced in the 1960's and 1970's, as well as projected growth rates. This growth is parallel to the State of New Hampshire growth as a whole and in Rockingham County. Derry does, however, have a unique situation in that extensive development in the early 1980's was curtailed by a ban imposed by the State while Derry upgraded sewage treatment facilities. Recent residential building of apartments and condominiums is extensive. Building permit figures for 1984 (see Table 10) show 216 new condominium units, 300 apartments, and 160 duplexes, not including pending projects of 800 units.

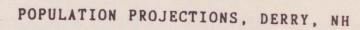
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FIGURE 3



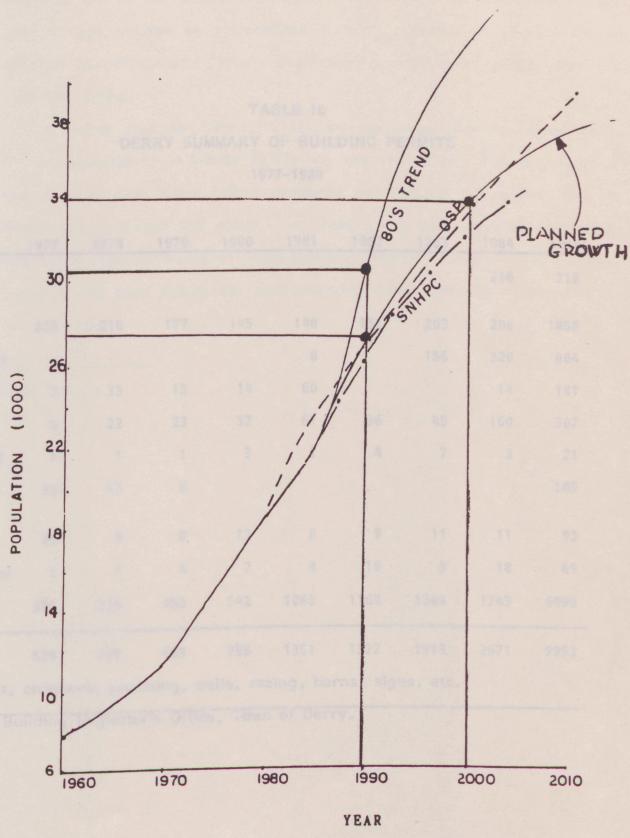


TABLE 10

DERRY SUMMARY OF BUILDING PERMITS

1977-1984

Permit	1977	1978	1979	1980	1981	1982	1983	1984	Total
Condo.								216	216
Single Family	226	210	177	145	140	151	203	206	1458
Apartment					8		156	300	464
Renewals	7	33	13	14	60			14	141
Duplex	8	22	23	32	61	36	45	160	387
Industrial	1	1	1	3	1	4	7	3	21
Business	50	47	8						105
Mobile Homes	25	8	8	13	8	9	11	11	93
Commercial	1	4	4	7	8	18	9	18	69
Other*	321	384	455	542	1065	1104	1384	1743	6998
TOTAL	639	709	689	756	1351	1322	1815	2671	9952
* Additions	-himn	ove plu	mhina v	vells, ra	zing, ba	rns, sig	ns, etc.		

*Additions, chimneys, plumbing, wells, razing, barns, signs, etc.

Source: Building Inspector's Office, Town of Derry.

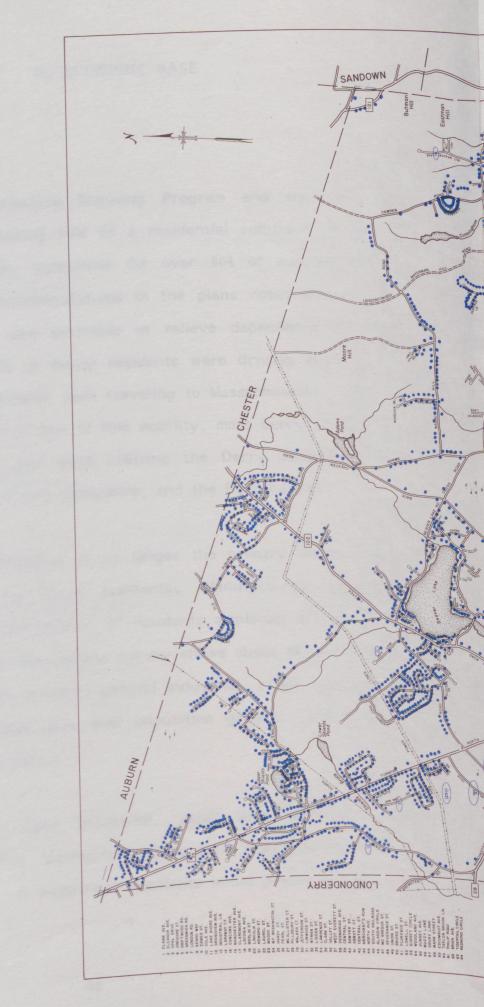
TABLE 10
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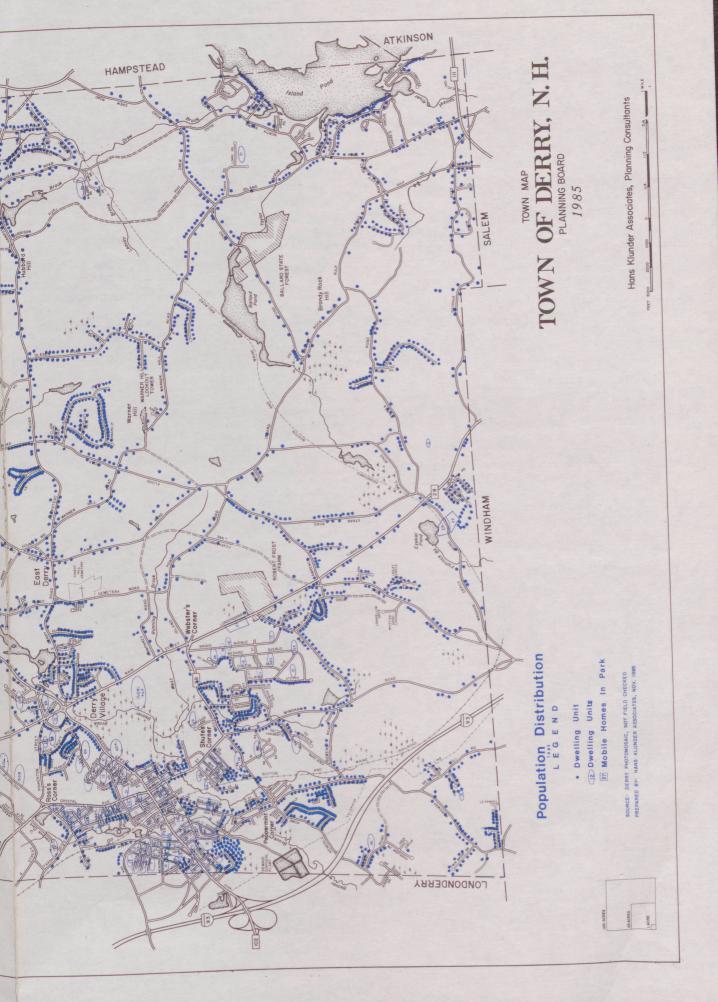
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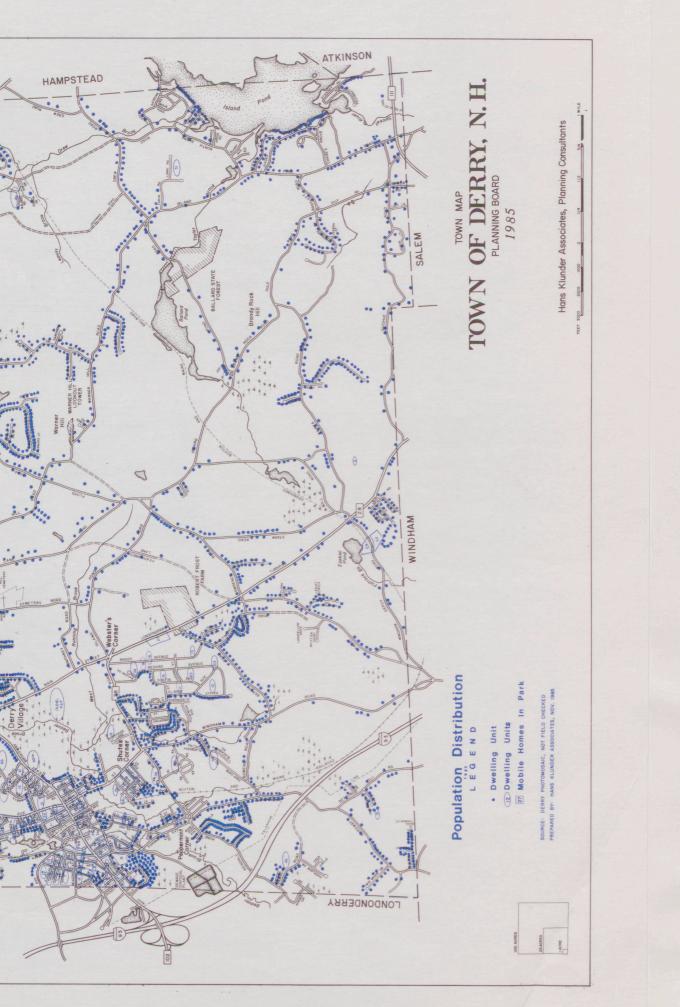
However, in the Public Opinion Survey, residents asked for more emphasis on the development of light industry and single family homes. Should such desires be implemented through adoption of policies toward changes in ordinances, Derry's population growth curve might alter the 1980–1986 trend.

A Master Plan for Derry, in response to citizen desires, should plan for a population of 34,000 to 36,000* by the year 2000. Planning now for new services that these future residents will demand allows the Town to direct where growth will occur - in areas where services, such as sewer and water, can be easily or inexpensively extended, while Derry's lakes, wetlands and open spaces are also protected from scattered development at the same time.

^{*}See Table 6.







B. ECONOMIC BASE

1. Overview

The 1965 Comprehensive Planning Program and the 1978 update described Derry's increasing role as a residential suburb. In 1965, the traditional shoe industry accounted for over 80% of manufacturing employment in Derry. Recommendations in the plans noted that diversified industrial development was desirable to relieve dependence on the one industry. By 1980, 73% of Derry residents were driving out of town to work; 34% of Derry residents were traveling to Massachusetts. (See Table 11, Place of Employment.) Due to this mobility, most Derry residents were not shopping in town, but were utilizing the Derry Shopping Plaza in Londonderry, the Mall of New Hampshire, and the Bedford Mall.

Today, the shoe industry is no longer the primary source of manufacturing employment for Derry residents. Manufacturing opportunities have diversified, and the percent of residents employed in manufacturing has declined. Although the citizens survey shows about 68.9% of residents still driving out of town to work, general industrial, retail, and commercial development has not kept pace with population growth. (See Table 10, Summary of Building Permits.)

Opportunities for light industrial, retail and services business development are extensive, particularly since many residents favored these in the Opinion Survey. A majority of residents would prefer to work in

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TABLE 11

DERRY, NH - PLACE OF EMPLOYMENT - 1980

Area	Employees
Manchester/Downtown	108
Manchester (remainder)	891
Bedford	68
Goffstown	48
Hooksett	54
Derry	2,564
Londonderry	438
Nashua	447
Merrimack	150
Nashua SMSA	272
Lowell, MA SMSA	219
Lawrence City, MA	427
North Andover, & Town of Andover	345
Salem & Windham	543
Lawrence/Haverhill, MA SMSA (remain	nder) 157
Boston	214
Boston SMSA	971
Concord City	128
Elsewhere	407
Not reported	1,013
Total Workers Residing in Derry	9,464

Source: US Census of the Population

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DERRY, WH - PLACE OF EMPLOYMENT - 1980

Derry. A unique opportunity exists in Derry to provide increased employment. Redevelopment of the central business district, which would serve to unify the community, extension of shopping opportunities on Route 102 (East and West Broadway), and continued building in the industrial park will advance these efforts; and the slow growth seen in the Industrial Park can be expected to increase with the recent purchase by the Nash Co.

2. The Components of Derry's Economy

Communities that rely primarily on residential development for tax base support are hit doubly hard with expenses in providing services such as school, police, and fire protection. Derry has an opportunity to broaden its tax base by utilizing its local work force. The following statistical analysis describes trends in economic growth for the State of New Hampshire, Rockingham County and Derry.

Derry's economy consists of three basic industries - Manufacturing, Service/Retail and Tourism/Entertainment. The third industry plays a minimal role in Derry's economy. Derry's lakes have attracted seasonal residents; however, many of these persons shop outside of Derry for goods and services. Also, conversion of seasonal dwellings to year-round is reducing the number of non-residents while increasing needs to provide town services. Even with the location of Pinkerton Academy, the government and institutional industry also play a small role in Derry's economy.

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3. Workforce Characteristics

An analysis of workforce characteristics is important to understanding possible changes in the roles of these industries within Derry's economy. As noted in the introduction to this section, approximately 73% of the resident population travel outside Derry to work. (See Table 11, Place of Employment.) Of those, who travel outside, 34% (2,333) work in Massachusetts or in predominantly Massachusetts Standard Metropolitan Statistical Areas ("SMSAs"), 14% work in the greater Manchester area, 6% work in the Nashua area, and 18% work within Derry's region.

Employment of Derry residents is shown on Table 12. In 1970, 4614 residents were employed while in 1980 there were 9466. The largest increase from 1970 to 1980 was in Technical, Sales, and Administrative positions. Increases in Managerial and Professional positions was also high. The number of unemployed in Derry, following the state's trend, is a very small percentage of the total workforce. In 1980, Derry shows a substantial number of females, not in the workforce, representing an untapped resource should more jobs be provided in Town.

4. Income

An understanding of income characteristics as well as occupations can help Derry plan for expansion of retail/service and industrial opportunities that will meet the needs and income of the population. Income characteristics also allow a comparison between communities. Table 13, Median Family

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TABLE 12
EMPLOYMENT OF DERRY RESIDENTS

Occupation (16+ years)	1980	1970
Civilian:		
Managerial and Professional	2322	1058
Technical, Sales and	2004	4000
Administrative	3031 769	1006 450
Service Farming, Forestry, Fishing	72	27
Precision Production, Craft		
and Repair	1384	802
Operations, Fabricators, and	1851	1255
Laborers	1001	1255
Armed Forces:	35	16
At mod 10100		
TOTAL EMPLOYED	9464	4614
TOTAL EMPLOYED	9464	4614
TOTAL EMPLOYED Male	5511	2960
Male Female	5511	2960
Male	5511 3953	2960 1654
Male Female	5511 3953 371 212	2960 1654 211 83
Male Female TOTAL UNEMPLOYED	5511 3953 371	2960 1654 211
Male Female TOTAL UNEMPLOYED Male Female	5511 3953 371 212 159	2960 1654 211 83 128
Male Female TOTAL UNEMPLOYED	5511 3953 371 212 159	2960 1654 211 83
Male Female TOTAL UNEMPLOYED Male Female	5511 3953 371 212 159	2960 1654 211 83 128

Source: 1970/1980 U. S. Census Comparison Tables 59/66

TABLE 12

EMPLOYMENT OF DERRY RESIDENTS

TABLE 13

MEDIAN FAMILY INCOME FOR DERRY AND ROCKINGHAM COUNTY

Area	1979 Median Family Income*	Change '69 '79 of P.C.I.	1979 Median HHold Income*	1979 Per Cap Income	% Persons In Poverty
Rockingham County	21181	4408	18993	7445	6.6
Derry Londonderry Portsmouth Salem Windham	21631 23861 17270 23196 27650	4496 4762 3669 4246 6306	19969 23027 14426 21248 26692	7402 7705 6416 7611 9647	5.9 3.6 9.3 5.6 4.3
State of NH	19723	3981	17013	6966	8.5

^{*(15} years or older)

Note:

The "household income" is income received in 1979 by all the household members, 15 years of age and older. This differs from "family income" which excludes income received by household members not related to the householder or persons living alone.

Source: 1980 US Census

TABLE IS
MEDIAN FAMILY INCOME FOR DERRY AND ROCKINGHAM COUNTY

	2496 2559 2246 2246 2246		

⁽¹⁵ years or older)

The "hoodestold income" is income received in 1979 by all the household members is years of age and older. This differs from "family income which excludes income received by household members not related to thouseholder or persons itving along.

Source: 1980 US Census

Income, shows the change from 1969 to 1979 for Derry, selected towns, and Rockingham County. It should be noted that "family income" is that income received in the calendar year 1979 by all family members 15 years of age and older.

Income figures indicate that Derry has a median household income which is higher than the Rockingham County and State of New Hampshire median for 1979. The percent of persons in the poverty rank (5.9) is also lower than the County average of 6.6% and the State average of 8.5%. For planning purposes, these statistics indicate Derry residents are in the middle to upper income brackets. Retail establishments and service industries in Derry appears able to market quality products successfully.

5. Manufacturing Employment

Approximately 33% of jobs provided in Derry are in the manufacturing sector, as shown on Table 14. Table 14 also indicates that in 1984, the number of employees working in Derry manufacturing establishments is a smaller percentage of the total employment in Derry (33%) than was shown in 1974 (44%). Of those persons employed in Derry, a greater percentage work in manufacturing than is true of the Manchester labor market as a whole.

Payroll and value added by manufacturing have increased, yet the number of establishments has remained constant. Despite this, the manufacturing industry has diversified as indicated on Table 15, Listing of Manufacturers. While Klev-Bro Shoe Manufacturing Company still accounts

Income, shows the change from 1969 to 1979 for Derry, selected towns, and Rockingham County. It should be noted that "family income" is that income received in the calendar year 1979 by all family members 15 years of age and older.

Income figures indicate that Derry has a middlen household income which is higher than the Rockingham County and State of New Hampshire median for 1979. The percent of persons in the poverty rank (5.9) is also lower than the County average of 5.95 and the State average of 5.55. For clending purposes, these statistics indicate Derry residents are in the middle to upper income brackets. Retail establishments and service industries in Derry appears able to market quality products successfully.

Manufacturing Employment

Approximately 33% of jobs provided in Derry are in the manufacturing sector, as shown on Table 14. Table 14 also indicates that in 1984, the number of employees working in Derry manufacturing astabilishments is a smaller percentage of the total employment in Derry (333) than was shown in 1974 (448). Of those percents employed in Derry, a greater percentage work in manufacturing then is true of the Manchester labor market as a whole.

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DERRY, NH EMPLOYMENT AND WAGES
AS PART OF THE MANCHESTER LABOR MARKET AREA

Industry	nent 1984		
	1974	1980	projections' for
Total	3174	4367	5220
Manufacturing	1407	1997	1746
Non-Manufacturing	1767	2370	3474
is indicated for the			
of the growth is one		Total Wages	army. Dimin
Industry	1974	Total Wages	
	1974	1900	1984
Total	\$19,336,573	\$45.583.207	\$69,137,227
Total Manufacturing	9,555,374	23,974,949	28,015,661
Non-Manufacturing	9,781,199	21,608,258	41,121,566
Non-Manufacturing			, , , , , , , , , , , , , , , , , , , ,

Industry	Average Weekly Wages					
	1974	1980	1984			
and Service Trace				_		
Total	\$117.16	\$200.73	\$254.71			
Manufacturing	130.60	230.87	308.57			
Non-Manufacturing	106.45	175.33	227.63			

1983 MANCHESTER LABOR MARKET TOTALS

or Derry. While the	Average	Total	Average
	Employ.	Wages	Week
Total Industry	64770	\$945,168,744	\$280.63
Manufacturing:	16561	284,899,364	\$330.83
Durable Goods	9374	169,744,985	348.23
Non-Durable Goods	7187	115,154,379	308.13
Non-Manufacturing Construction/Mining Trans. Comm. Trade Fin. Insur. RE Services & Other Government	48209	660,269,380	263.38
	3305	61,767,730	359.41
	3165	74,079,277	450.11
	19499	213,498,201	210.56
	5916	93,610,893	304.30
	16324	217,313,279	256.01
	5573	83,343,525	287.59

Source: NH Dept. of Employment Security

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DERRY, NH EMPLOYMENT AND WACES AS PART OF THE MANCHESTER LABOR MARKET AREA:

for the largest number of employees, it only employs approximately 30% of manufacturing employees, as compared to 80% employed in the shoe industry in 1965.

Table 16 shows non-agricultural wage and salary projections for the Lawrence/Haverhill SMSA for 1990. Continued growth in employment opportunity is indicated for the towns surrounding Derry. Slightly less than half of the growth is expected to be in manufacturing. Similarly, opportunity in Derry can be expected to grow as building continues in the Industrial Park. To meet desires of residents for local employment, Derry should plan to utilize a greater percentage of employment growth than in the past.

6. Retail and Service Trade

As indicated in the manufacturing section, 67% of employment in Derry now falls outside of the manufacturing sector. Table 17 shows retail trade statistics for Derry. While the total number of establishments has not increased substantially from the late 1960's, the number of employees and annual sales have increased. From 1967 to 1982 the number of payroll employees increased by 663 persons. Approximately 2,000 people may be employed in the retail trade if non-payroll employees are also included. Thus, a greater number of persons may be employed in the retail trade than are in the manufacturing trade. Retail is playing an increasing role in Derry's economy.

The opportunities for retail expansion are also considerable as a

for the largest number of employees, it only employs approximately 30% of manufacturing employees, as compared to 80% employed in the shoe industry in 1965.

Table 15 shows non-agricultural wage and salary projections for the Lawrence/Haverhill SMSA for 1988. Continued growth in employment opportunity is indicated for the fowns surrounding Derry. Slightly less than half of the growth is expected to be in manufacturing. Similarly, opportunity in Derry can be expected to grow as building continues in the industrial Perk. To meet desires of residents for total employment, Derry should plan to utilize a greater percentage of employment growth than in should plan to utilize a greater percentage of employment growth than in

6. Retall and Service Trade

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The opportunities for retail expansion are also considerable as a

TABLE 15
LISTING OF MANUFACTURERS

DERRY, NH - 1984

MANUFACTURER	#EMPLOYED	PRODUCT	AGE	SALES**
Black Rock, Inc. Blondheim Modular Manu., Inc. CNC Precision, Inc. Chase, Benjamin Co., Inc. Columbia Screw Co., Inc. Eastern Rainbow, Inc. Electronics Corp. of America Fishercraft, Inc. Galluzzo, Anthony Corp. Gschwind, Karl, Machine Works Gentex Corporation Hadco Printed Circuits, Inc. Hatch Printing Co. Hawk Quality Products, Inc. Industrial Container, Inc. Jesco Fasteners Co. Klev-Bro Shoe Mfg. Co. Mark-All Industries McCord Winn Subsid. Ex-Cell-O Photofabrication Tech. Inc. Shaw, John E., Co., Inc. Standard Sash & Door Company Thornton Mfg. Co., Inc. Treasure Masters Corp.	75 Mode 2 Mach 15 Wood 15 Scre 25 Colo 110 Com 8 Pine 21 Arcl 17 Mach 27 Acon 4 Com 15 CNC 3 Woo 3 Fast 400 Wom 15 Silk 20 Aut 56 Elec 12 Mach 65 Wine 7 Alu	ware ular Housing hine Shop den plant stakes w machine products or separations bustion control sys. e gifts hitectural millwork hine shop ustic devises hed circuit boards mercial printing c equipment den shipping cont. teners hens shoes r-screening textiles o fuel pump armats. ctric components hine Shop dows & door units minum resistor hous. Idding and baby gifts	1971 * * 1867 * 1977 * 1978 1983 1965 1974 * * * * 1958 1980 * 1973 1982 1974 1952 1941 1964 *	D* BB* E* * * DD* * * * A* CDEBFC*

*Complete information not available for:

Continental Group, Inc., Derry Publishing Co., and LeBlanc Plastics, as well as those noted above.

**Key: A - under \$100,000 D - \$ 500,000 - \$ 1,000,000 E - \$1,000,000 F - \$5,000,000 F - \$5,000,000

Source: Made in New Hampshire, a Directory of Manufacturers and Manufactured Products, 1984/85 edition.

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LISTING OF MANUFACTUREDS

DERRY, NH - 1988

Continental Group, Inc., Berry Publishing Co., and LeBlanc Plastics as well as those noted above.

**Key: A - under \$100,000 D - \$ 500,000 - \$ 1,000,000 B - \$100,000 - \$ 5,000,000 C - \$250,000 F - \$5,000,000 - \$ 5,000,000 C - \$250,000 - \$5,000,000 C -

Source: Made in New Hampshire, a Directory of Manufacturers and Manufactured Products, 1984/85 addition.

TABLE 16

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT (ESTIMATED AND PROJECTED)

NH Portion Lawrence-Haverhill SMSA ¹	1979	1990	Net Change
Total Industry	14,250	22,100	7,850
Manufacturing Durable Goods Primary and Fabricated Metals	3,950 3,250 450 2,000	7,400 6,650 750 4,850	3,450 3,400 300 2,850
Machinery (including electrical) Stone & Clay, Transportation, Equipment, Instruments & Other Nondurable Goods	800 700	1,050 750	250 50
Non-Manufacturing Construction & Mining Trade Services	10,300 750 5,050 1,950 2,000	14,700 850 7,400 2,950 2,750	4,400 100 2,350 1,000 750
Government Other	550	750	200

Derry should note that labor market figures for 1985 and future projections will list Derry with the Lawrence/Haverhill statistical area, rather than with the Manchester area as in the past.

Source: NH Department of Employment Security, 1982.

SI ZIBAT

NONACRICULTURAL WASE AND SALARY EMPLOYMENT (ESTIMATED AND PROJECTEM)

Derry should note that labor market floures for 1985 and future projections will list Darry with the Laurence Higherhill statistical area, rather than with the Manchester area as in the past.

NUMBER OF RETAIL TRADE ESTABLISHMENTS BY TYPE AND SALES VOLUME: DERRY, NH

В1						10)
	No.	of Establish	ments		(in \$1,00	1002
Business	1967	1977	1982	1967	1977	1982
Selvice and	1307					
retell, while SCOW						
Building Materials,						
Hardware, & Farm		12	6	\$1107	\$3522	\$4276
Equipment Dealers	5	13	5	385	*	8849
General Merchandise	3	5		4044	14960	20919
Food Stores	14	17	10		13627	*
Automotive Dealers	7	13	7	3302	*	7945
Automotive Dearcis	9	10	9	^	•	1343
Gas Service Stations						****
Apparel & Accessory	9	5	8	405	664	1109
Stores						
Furniture, Home						
Eurnishings, &	8	12	6	402	1108	867
Equipment Stores	0					
Eating & Drinking	40	23	15	303	2798	4086
Places	12	23				
David Stores &		3	4	*	1075	2087
Drangietary Stores	2		19	2484	9483	*
Misc. Retail Stores	23	36		118	0	0
Nonstore Retailers	9	0	0		0	0
Business w/o Payroll	0	0	60	0	0	and the same
Business wie in		is creston a	altress mail			
				44 11054	¢55100	\$76429
	101	137	149	\$14251	\$55198	\$10423
TOTALS						
			1 11	1: A	id diccloss	IFA

^{*}Indicates information withheld in census publication to avoid disclosure.

Source: US Census of Business, Retail Trade

TABLE 17

NUMBER OF HETAIL TRADE SETABLISHMENTS

Indicates information withheld in census publication to avoid disclosure,

Source: US Census of Business, Relate Frade

The thing is the

majority of Derry's residents shop outside of town. Any area planned for future retail development should be carefully integrated with plans to upgrade Derry's downtown and with commuter patterns.

Service industry comparisons are indicated on Table 18. As with retail, while growth in employment and sales has increased, service industries are not playing as large a role in Derry's economy as they might. In the Attitude Survey, residents expressed a need for more service industries.

7. Socio-Economic Considerations

From the preceding discussion on population and the economy, Derry appears to be continuing a role established in the 1960's as a bedroom community. Building permit records bear this out (see Table 10). Development in Derry has created additional jobs for employees as the local population has grown, but the percentage of residents working outside of Derry has remained constant at a high level of 73%.

The nature of the employment opportunity in Derry has changed, putting less emphasis on manufacturing and diversification of the manufacturing industry. However, there is considerably more opportunity to expand light industrial and retail activities in Derry. As noted on page 41, there are a number of women not in the labor force who might be if local employment were provided. Of the 9,464 Derry residents who were employed in 1980, the Public Opinion Poll indicates there are many who would prefer working in Derry.

62 E. Broadway Derry, N. H. 03038 najority of Derry's residents shop outside of town. Any area planned for toture retail development should be carefully integrated with plans to upgrade Derry's dewittent and with commuter patterns.

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NUMBER OF SERVICE INDUSTRIES BY TYPE & SALES VOLUME

DERRY, NH - 1967-1982

Industry Year:	1967	Type 1977	1982	1967	ales (in \$1	1982
Hotels/Motels	5	9	3	*	281	455
Auto Repair/Garages	7	22	10	*	1,513	1,563
Amusement/Recreation	13	22	4	*	540	251
Health (excluding hospitals)	N/A	N/A	21	*		4,317
Legal		6	5	*	549	575
Personal Service	27	74	173**	*		
Miscellaneous Bus.	13		.,,	*	1,253	4,501
Miscellaneous Repair		16		*	387	
TOTALS	65	149	216	1,497	4,523	11,662

^{*}Individual breakdown not available.

**Estimated.

Source: US Census of Service Industries



HOUSING

SECTION IV

The 1965 Comprehensive Planning Program for Derry projected a 1985 population of 15,800 to 19,000 persons and a need for 2,400 new dwelling units. As projected, Derry could have 5,080 homes. However, statistics show a much larger total of over 9,000 housing units. As noted in the population section of this report, Derry, like many other communities in southern New Hampshire, has experienced dramatic increases in growth. In recent years, Derry has also seen an explosion of apartments and multifamily housing. These factors and trends toward smaller family size have all contributed to more housing units in Derry than those anticipated by past studies.

Housing is a major element of land use in Derry. As indicated in the Land Use section of this report, much of Derry's new housing, particularly single family homes, is occurring in scattered locations throughout Town. Thus, in 1985 Derry was faced with a rapidly expanding population, due to an influx of new construction that was randomly placed on the land, and a need to assess adequate provision of housing for an expanded future population.

Chapter 674:2, Part II of the New Hampshire State Enabling Legislation states that a Master Plan shall include "A housing section which analyzes existing housing resources and addresses future housing needs." To comply with this requirement, an inventory of housing resources must be conducted and reviewed, existing and future housing needs must be studied, and economic consideration must be given to provide adequate

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housing for varied income groups and family sizes.

Derry has started this process. A Town Subcommittee on Housing has compiled many statistics for the 1985 Master Plan Revision. Several statistics are included herein. In reviewing housing conditions and concerns, Derry must consider not only the impact on Town resources, but also on community services and the overall character of the Town and its subsections. These are all affected by types and quality of housing.

Table 19 and Figure 4 show Derry's substantial increase in housing supply and reveals a correspondence with the extensive population growth. The number of units added to the supply was 3,251 between 1970 and 1980 and 2,111 between 1980 and June, 1985*, for a total number of 9,179 units. This represents an increase of 85% between 1970 and 1980, and 29% between 1980 and mid-1985. Derry's increase in single family and multi-family housing supply had the largest increase among adjacent, comparable-sized towns in its region during the 1980-1983 period. (See Table 20.)

Increases in single family homes in Derry were high (approximately 200 per year*), but relatively stable, in recent years. However, increases in multi-family housing have risen dramatically in the last three years. The number of multi-family units built in 1984 and 1985 is approximately 300% - 400% more than the number of single family homes built in this same period. For instance, between 1980 and June, 1985, multi-family units increased

^{*}Source: Building Inspector's Office.

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Table 19 and Figure 4 show Derry's substantial increase in housing supply and reveals a correspondence with the extensive population growth. The number of units added to the supply was 3,251 between 1970 and 1980 and 2,111 between 1980 and June, 1885*, for a total number of 9,179 units. This represents an increase of 858 between 1970 and 1980, and 298 between 1930 and mid-1985. Derry's increase in single family and multi-family housing supply had the largest increase among adjacent, comparable-sized towns in its region during the 1980-1983 period. (See Table 20.)

Increases in single family homes in Derry were high (approximately 200 per year*), but relatively stable, in recent years. However, increases in multi-family housing have risen dramatically in the last three years. The number of multi-family units built in 1984 and 1985 is approximately 3008 4008 more than the number of single family homes built in this same period. For instance, between 1989 and June, 1985, multi-family units increased

Source: Building Inspectorie Office.

42%, as compared to the 23% increase for single family homes. Apartment construction has dominated the multi-family housing market, particularly in 1984.

The sewer moratorium imposed by the State in the 70's, and lifted in Derry just before the flurry of building activity makes it difficult to assess this trend. With Derry's limited space left where multi-family housing development would be allowed under the Town's present zoning laws, it is expected that multi-family housing construction will lessen after 1986.

Multi-family housing development has affected another important aspect of Derry's population base. Between 1970 and 1980, there were 3,251 housing units added with a population increase of 7,163 persons. This suggests that approximately 2.2 persons per new dwelling unit were added. (If the estimated figures for new homes added between 1980 and 1984 are considered**, the figures for persons per new unit added decreases to 1.38.) This supports statistics showing smaller family sizes and also supports the fact that apartment and condominium dwellers generally have, initially at least, fewer children.

Houses in Derry today are being occupied by fewer persons on the average than they were in years past. In 1970, Derry's population was 11,712 persons occupying 3,551 households - 3.3 persons per household average. In 1980, persons/household had dropped to 2.8*, based on

^{*}U.S. Census, 1980

^{**52} were apartments, condominiums and duplexes.

123, as compared to the 238 increase for single family homes. Apartment construction has dominated the multi-family housing market, particularly in 1984.

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^{*}U.S. Census, 1980

sexsloub bas smulaimobaco streetses and duplexes

18,875 persons and 6,653 households. Population and household estimates for 1984 indicate a further reduction in household size to 2.5 persons.

While it is important to evaluate household size when planning for needs of a community's population, it is also important to examine housing use as a part of land use. The Land Use chapter indicates that Derry has consumed 5,210 acres for residential purposes, 4,726 for single family houses, 203 acres for multi-family and 381 acres for two-family. At the current rate of land consumption, all available land for building could be consumed in 30 years.

A determination of housing need is primarily based on an analysis of future population growth and the make-up of that population. Another important consideration is to examine income levels to assure that affordable housing is provided for all income levels in Derry. The following factors were considered to determine projected housing needs:

1. Derry's population is expected to grow at a slightly lesser rate from 1985-1990 than it did from 1980-1985. Estimating a 1986 population of 25,656 people, population is expected to be 30,175 people by 1990, a growth increase of 59.8% over 1980. A slowing of multi-family unit construction is anticipated due to current limitations of available land zoned for such use. 18,875 persons and 5,653 households. Population and household estimates

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- National trends, which in the past have led to smaller household sizes, are expected to continue but stabilize in relation to population growth.
- 3. New housing units added in the form of multi-family dwellings from 1980-1984 suggest a very low occupancy rate (1.4 persons per unit added).
- 4. The low occupancy rate from 1980-1984 per new unit added is primarily due to the influx of apartment and condominium development. This occupancy rate is expected to increase due to an expected slowing of multi-family housing construction as a result of a decrease in available land zoned for these purposes.
- 5. If a low occupancy rate of 1.8 persons per new unit is projected for the second half of the 1980's, then the 1990 estimated population of 30,175 people would indicate a need for 6,277 new units from 1980 1990. Similarly, at 1.8 persons/unit, an estimated population of 34,000 in the year 2000 would require an additional 5,458 new units between 1990 and 2000. This would result in a total housing supply in Derry of 17,984 in the year 2000 based on current land use regulations.

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At a household size of 2.8 persons (1980 Census) Derry needs 4,035 new development units between 1980 and 1990, and 3,508 dwelling units between 1990 and 2000 (using 1980-1986 rate of growth). In either event, Derry's land is being consumed at a rapid rate. This land consumption could be slowed if ordinances are amended to direct and manage such growth.

In 1980, the Town of Derry had 3,318 households (out of 6,622 total*) with an income below \$20,000. Thus, approximately 50% of the households fell in the low-to-moderate income bracket. Of the total families (5,013), 274 (or 5.5%) had incomes below the poverty level, based on \$13,700 for a family of four. Development of duplexes, apartments, and condominiums also added to the supply of lower priced dwelling units. As 4% of the total families is the regional poverty level, it is evident that Derry continues to provide a fair share of housing needs for low and moderate incomes, as compared to the regional housing market.

Statistics provided by the Housing Committee (See Table 21) also indicate that Derry has below average asking prices for homes compared to six of the seven surrounding towns.

Should Derry continue to provide the same rate of affordable housing as in 1980, provisions for low income families need to be made for approximately 5.5% of the 17,984 total housing-stock anticipated for the year 2000 (or 14,611 at 2.8 persons/dwelling unit).

^{*}U.S. Census, 1980

At a nousehold size of 2.8 persons (1980 Census) Derry needs 4,035 new development units between 1980 and 1990, and 3,506 dwelling units between 1990 and 2000 (using 1980-1986 rate of growth). In either event, Derry's land is being consumed at a rapid rate. This land consumption could be slowed if ordinances are amended to direct and manage such growth.

In 1980, the Town of Derry had 3,318 households (out of 6,622 total*) with an income below \$20,000. Thus, approximately 508 of the households fell in the low-to-moderate income bracket. Of the total families (5,013), 274 (or 5.58) had incomes below the poverty level, based on \$13,700 for a family of four. Development of duplemes, apartments, and condominiums also added to the supply of lower priced dwelling units. As 48 of the total families is the regional poverty level, it is evident that Derry continues to provide a fair share of housing needs for low and moderate incomes, as

Statistics provided by the Housing Committee (See Table 21) also indicate—and Derry has below average asiding prices for homes compared to six of the seven surrounding towns.

Should Derry continue to provide the same rate of affordable housing as in 1960, provisions for low income families need to be made for approximately 5.5% of the 17,982 total housing-stock enticipated for the year 2600 (or 18,611 at 3.8 persons/dealling unit).

^{0.5.} Census, 1920

The Citizens' Questionnaire Survey (see Appendix) indicated that a majority of Derry's residents felt that residential growth should be slowed and that single family housing should be encouraged with mild restrictions while apartments and duplexes should be discouraged. In addition, 95% indicated that Derry should have more stringent codes and enforcement programs to protect the environment.

With recent multi-family housing development, Derry has gone a long way toward meeting the needs for affordable housing. However, in many cases it is the scattered development of single family houses that detracts most from Derry's character. The scattered nature of the developments, the sameness of design, the lack of available public services and, finally, the lack of important public open spaces and highway facilities all contribute to the loss of character.

There are certain measures which can be proposed in a future Land Use Plan and implemented through zoning, site plan review, and other ordinances which would help Derry protect the natural amenities it has left and encourage innovative housing development. As part of the Master Plan process, Derry needs to carefully identify all land which should not be developed because of environmental reasons or for public benefit. In addition, certain areas where services can be easily provided should be designated for appropriate types of development. Conversely, where public service facilities are lacking, the degree of density allowed should be timed to correspond with public service extensions.

Derry still needs to provide a mix of housing types; however, this should not be done at the expense of the environment, traffic circulation, provision of other services, or visual character. Apartments, duplexes, condominiums, and single family homes on small lots should be allowed only in a sewered district in order to

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continue to provide for orderly development.

Derry can insure that developments take place where they make environmental and fiscal sense by designating specific land areas for different types of residential, commercial or industrial growth. In addition, Derry should consider various forms of preservation of wetlands, flood plains, high infiltration soils, and unique natural and scenic areas.

Derry can direct and manage growth by adopting regulations that protect the community welfare and, at the same time, encourage innovative design, which assures housing opportunities for all people.

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TABLE 19
HOUSING SUPPLY, DERRY, NH

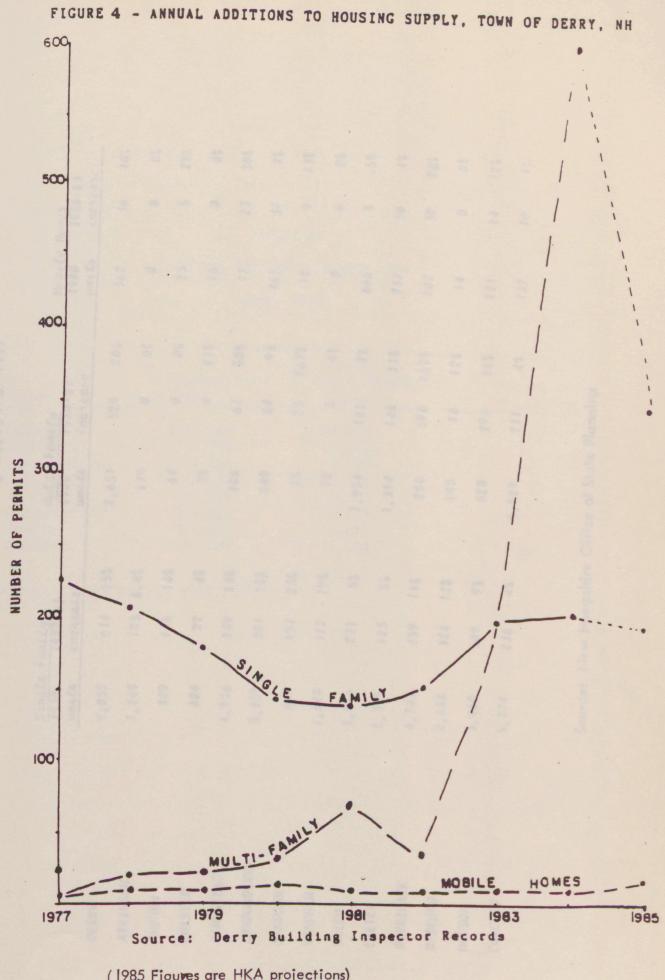
	Single		Multi- Famil		Mobile Homes	TOTAL
Year	Family		raiiiii	У	11011100	
1970 Census	2,300		1,15	7	360	3,817
1370	· OFF		2,65	1	362	7,068
1980 Census	4,055		2,00			
		Apt./	Cond.	Dupl.		
1980 Town	145 140	8		32 61	13	190 217
1981	151			36	9	196
1982	203	156		45	11	415
1983	206	300	216	160	11	893
1984	98	120	18	36	8	280
1985*	30					
1980-1985* Increase	943	584	234	370	60	2,191
Total Year-Round Units June 1985	4,998		3,8	39	422	9,259
1970-1980	1,755		1,4		2	3,251
Change % Change	76		1	29	.5	03
1980-1985 % Change	23			42	17	29
*6 Months 1985						

Source: 1970, 1980 Census, Town of Derry Building Inspector Reports

TABLE 19
HOUSING SUPPLY, DERRY, NH.

ATOT		
3,817		
7,063		
150 217 196 415 893 893		
2,191		
9,259		
3,25		
29		

Sources 1979, 1946 Census, Town of Derry Building Inspector Reports



(1985 Figures are HKA projections)

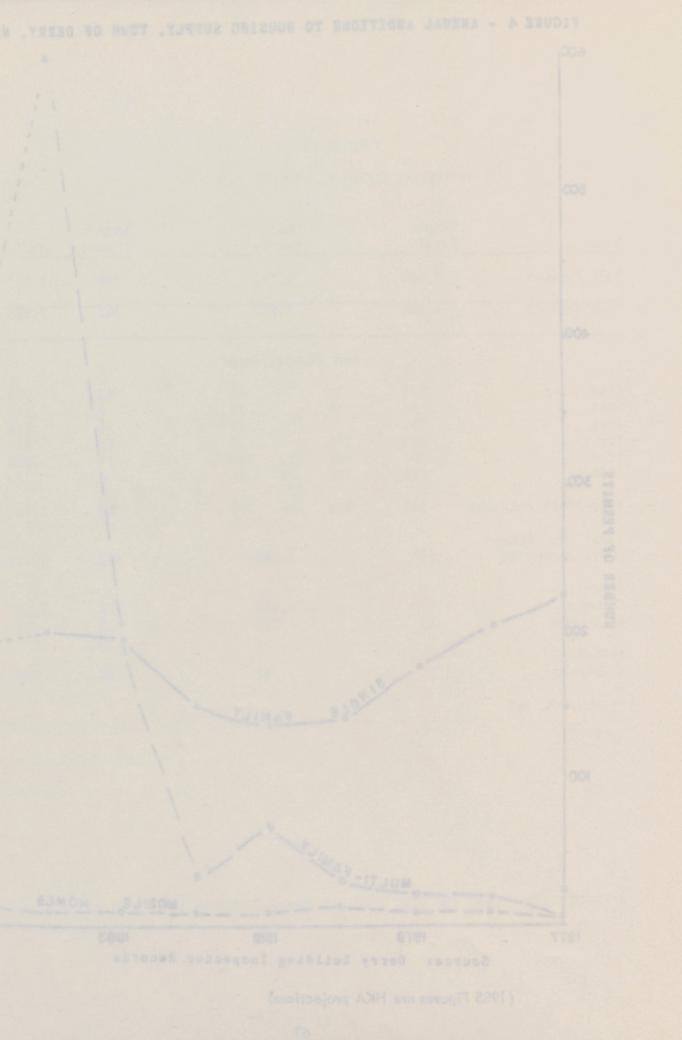


TABLE 20

DERRY & ADJACENT COMPARABLE 5121 TOWNS Increase in Housing Supply 1980-1983

	Single Family	amily	PCO.	Multi. F	Multi Family		Mobile Homes	Home 3	
	unita	Inchease	36	units	increase	36	1980	1980-63	2.5
DERRY	4,055	919	158	1,651	529	20%	362	j6	10%
ATKINSON	1,249	105	8.48	179	0	2.0	0	0	30
AUBURN	648	116	148	*9	0	3.0	23	. ~	22%
CHESTER	909	22	*	35	36.1	==	16	0	90
HAMPSTEAD	1,136	149	138	106	19	508		23	30%
LONDONDERRY	3,169	391	128	676	**	76	163	=======================================	76
SANDOWN	649	151	238	15	25	1678	72	6	. 35
WINDHAM	1,648	312	198	78	3	4.0	0		80
SALEM	5,805	172	58	1,974	141	78	646	. ~	9 %
EXETER	2,355	125	58	1,314	118	118	137	30	9
MERRIMACK	4,147	159	1118	238	398	1678	107	30	20%
BEDFURD	2,688	328	128	145	- 8	128	14	0	919
наргом	3,420	309	86	828	298	368	121	=	120
CONCORD	5,774	236	940	5,589	231	70	137	10	

Source: New Hampshire Office of State Planning

CK STRYE

parameter of the point and 200 high 1880-1883

TABLE 21
LISTING PRICES - DERRY, NH
July, 1985

Town	Median Price	Median Real Estate Taxes	# Houses on the Market
Derry	\$136,100	\$1,921	52
Salem	131,700	1,683	43
Londonderry	138,400	2,497	33
Hudson	147,200	2,664	3
Atkinson	152,700	2,387	6
Hampstead	154,600	1,793	12
Chester	173,900	2,099	5
Windham	193,000	2,165	34
			a de la companya della companya della companya de la companya della companya dell

Source: MLS Listing Book, 7/85

TABLE 21
LISTING PRICES - DERRY, NH

22 45 33 45 45		

Source: MLS Listing Book, 1185

HOUSING PLAN

At a projected growth rate of 59.8%, based on current planning and land use regulations, Derry's population is estimated to be 30,175 residents by 1990. (See page 33, Derry Population Growth.) Further population projections in this Master Plan document indicate that the population may reach 40,000 by the year 2000. This would require an increase of between 7,543 and 11,735 housing units for the twenty years 1980-2000. The projected increase per decade in total number of dwelling units is considerably greater than that for the decade 1970-1980, which was 3,251 units.

The proposed Land Use Plan makes provision for orderly residential growth in the community, assigning priority designations for areas of development by establishing different density patterns. The total land area within the community and the densities recommended in the Land Use Plan can more than accommodate the projected population increase. The Land Use Plan makes provision for various modes, types and densities of housing, thus affording an opportunity of choice of environment and housing cost.

A community must recognize the necessity for accommodating the housing needs of low and moderate income families. In 1980, 5.5% of Derry's families fell below the poverty level. To continue meeting the demand for low-to-moderate income housing, the community has, in the past, undertaken the following measures:

1) An amendment to the zoning ordinance which allows mobile homes and manufactured housing to be accommodated in residential sub-divisions throughout the community. Previous to the amendment, mobile homes were permitted only in mobile home park districts.

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This change affords developers the opportunity to locate mobile homes and manufactured housing in areas in the community that are suitable for such development. The Land Use Plan now recommends implementation of a "Housing Plan" by designating those areas that are in high-density residential, medium-density residential, and low-density residential with off-lot sewer and water facilities for low and moderate income housing opportunities.

- 2) Through the Derry Housing Authority, Derry has made available grants, loans, and rent subsidies to low and moderate income families. Of particular note is the Town's effort to upgrade substandard mobile home units and their surroundings.
- 3) A large number of families and households in the low-to-moderate income range are elderly. Derry's efforts to accommodate housing for the elderly, through a subsidy program in the downtown area, . demonstrates Derry's desire to provide housing for the needy. It is proposed that this program be continued and expanded as the Town's population matures from child-bearing to retirement age.

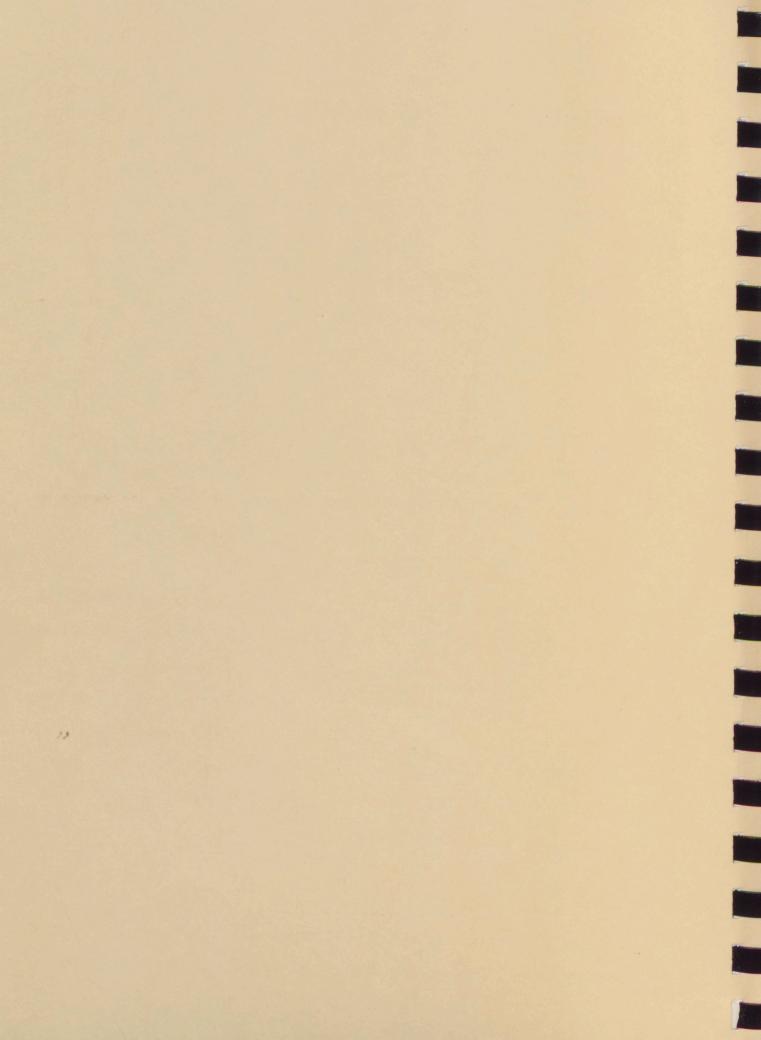
As a new measure - if and when affordable housing becomes a further public issue - the Housing Plan recommends an incentive program to developers in the high-density and medium-density residential areas to allow additional bedroom units per acre if housing for low and moderate income families will be accommodated. Such an incentive program could include an increase in densities or public subsidies in order to reduce development costs and lower the per unit cost, making housing available and affordable to families with income in the low and moderate range.

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Derry has, in the past, made provisions through the marketplace to create opportunities for low and moderate income family housing. It should not be the intent of either the Land Use Plan, zoning, or other ordinances and regulations to reduce these opportunities. It is the intent of the Housing Plan, ultimately by its implementing measures, to create incentives and opportunities for meeting housing needs for young families, low and moderate income families, and the elderly. It is important that this be accomplished without sacrificing an attractive environment or lowering standards below their acceptable limits. Rather, Derry should allow the marketplace to create these opportunities within the framework of a continuously attractive community, with due consideration being given to special incentives within the broad market of housing development, and, possibly, with public facility subsidies.



SECTION V

TRANSPORTATION

Because of its very nature, intracommunity transportation, intercommunity, and regional/interstate transportation is accepted as a public responsibility. This is true, save for strictly abutting traffic that can sometimes be accommodated on privately constructed and maintained roads. In the case of Derry, the Town's responsibility includes 128.32 miles of streets and highways; and the state/federal responsibility within the Town is for 24.91 miles of streets and highways.

In Derry, transportation has taken on a new face. Railroads, once the key transportation link with the outside, have been abandoned; and today, highway-oriented movement of goods and people is the norm.

Road networks influence trends and directions in development. This generalization does not apply to Derry, however. Development has taken place regardless of the adequacies and inadequacies of street links with the major local and interregional highway network. This is one reason why Derry's Master Plan effort must address the appropriateness of streets (i.e., their use, their inadequacies, their designated functions) and do so by planning for access to the various segments of the community with an improved road system. Until then, development should be reduced to a minimum.

1. Street and Highway Use Classification

With the exception of the Interstate and Route 28 bypass, Derry's road network is one that was laid out at a time when the average speed

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Street and Highway Use Classification

With the exception of the Interstate and Route 28 bypass, Derry's need network is one that was laid out at a time when the average space

was between 5 and 8 miles per hour and the modes of transportation were horse and buggy or wagons. While there have been some improvements in surface treatment (from gravel to paved and tarred, plus some realignments), the basic road network in Derry, as historic maps indicate, has changed little over the last hundred years.

In the 1965 Master Plan, it was suggested that adequate rights-of-way and a street classification system be approved and the program be adopted as part of the community's long-range policies. At that time, detailed street standards and highway classifications were also set forth. In addition, several proposals were identified, which included a relocation of Route 102, an extension of South Avenue Extension, and a relocation of Island Pond Road upgrading it from 'town road' to part of the State's secondary system.

The road classification and their standards today, particularly as it applies to road improvement programs to be incorporated with subdivisions as they take place still must be implemented. In fact, as one travels the roads today, the only differentiation between classifications are those between the State's highway network and the Town's highway network, and these differences are sometimes difficult to discern. Also, there is differentiation in funding responsibilities, from local level and compact urban area designations to state highway responsibilities.

The Town of Derry today is undertaking a detailed study of its physical road conditions and developing an improvement program based on use and needs. Such a study should reflect capital requirements that will be necessary to develop a road network capable of handling traffic generated by an ever-increasing demand coming from subdivisions and population growth.

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2. State of New Hampshire Classification

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Road Classifications
(in miles)

	State Primary	State Secondary	,		t Town Highwa		
Class	1	11	111	IV	V	VI	Total
Derry	11.64	13.21		36.80	80.66	10.92	153.23
Londonderry	19.15	9.00		7.60	114.87	6.30	156.92
Salem	10.84	7.79	nshin	90.43	35.32	1.06	145.44

Source: NH Department of Public Works and Housing, 1985

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TABLE 22

Road Classifications (in miles)

Identifiable Needs

- a. The adoption of a street and highway classification system based on planned use areas.
- b. A unified support towards the Route 102 relocation.
- c. The incorporation of the payback-fee system into the subdivision approval process.
- d. The coordination of the recently authorized and currently conducted Road Condition and Improvement Program with the Master Planning process.
- e. A land use plan that will lessen future road demands.
- f. To control access in location of high volume traffic generated.

Traffic Volume

The existing traffic volumes are the direct result of traffic generated in residential subdivisions and the concurrent commercial and industrial development. Many of these conditions were anticipated in 1965. Consequently, they are not a result of lack of planning or poor planning, but a direct result of implementation and poor recognition of needs as far as traffic is concerned. The increase in traffic volume has created a road network that is the major complaint of Derry citizenry; and the congestion and inadequate road design of this network results in accidents, frustration, and undue delays.

The Southern New Hampshire Regional Planning Commission Transportation Study showed that traffic volumes in Derry range from a count of 700 vehicles on Ash Street to 24,300 vehicles per day on West Broadway. The 24,300 vehicles per day average is

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nearly as high a count as the 28,000 vehicles on the Interstate north of the Derry exit. The count on Interstate 93 shows that approximately 8,000 vehicles leave the Interstate in order to enter the local road network in Londonderry and Derry. The 30,000 vehicles converging in the center of town are creating local traffic problems of considerable magnitude.

There are additional counts available on Route 28 near the Hood Shopping Plaza - 18,000 vehicles; Crystal Avenue north of Broadway - 16,400 vehicles; and Route 28 north of Ross's Corner - 15,000 vehicles.

The average daily traffic on Birch Street shows 11,100 cars per day and drops off to 6,600 vehicles per day on Rockingham Road. Bypass 28 shows 8,900 vehicles near the Old Manchester Road and 3,300 vehicles just north of the "Circle" (an indication of the diffusion of traffic at Tsienneto Road). Hampstead Road carries 4,300 vehicles east of Adams Pond Road and East Derry Road carries 7,300 vehicles near Cemetery Road. This latter comparison shows the "terminal traffic" located off Hampstead Road east of Cemetery Road.

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As a result of the Current Road Condition study, additional counts were taken and are special counts for purposes of use in valuation. The following is a tabulation as furnished by Rodney Bartlett, Director of Derry's Public Works Department:

Location	ADT*
North Shore Road (between Chester & Worthley	1,058
Rollins Street (200' west of Crystal)	1,845
Highland Avenue (between South Avenue & Mac	Gregor) 1,347
Warner Hill Road (200' south of Hampstead)	650
Old Chester Road (between Young Road & Hamp	ostead) 906
Elm Street (200' north of Broadway)	1,800
English Range Road (near Cove Drive)	2,116
South Avenue (200' west of Birch Street)	3,497

*Average Daily Traffic Source: Derry Road Study, 1985

Mass Transit

There is no public transportation system available in the Town of Derry. This makes the community rely on individualized transportation which has, over the years, led to considerable citizens' complaints about a totally inadequate road network.

Summary

The recently authorized Road Conditions Study is a first step towards remedial measures in overcoming the conflict between land use development and service road access backed by a collector and thoroughfare network.

As the Town of Derry continues to grow, off-site improvements and their considerations should become part of the development approval process. The Town, in its continuing Master Planning efforts, should

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ascertain the full impact of land use and transportation coordination and develop a priority system for road and highway improvement programs based on existing deficiencies.

The Governor's Advisory Commission on Highways has not yet found it within the state's need to remedy the nearly intolerable situation existing on Route 102. To continue bringing traffic into Derry without any recognition of the existing problem constitutes neglect by the state and this should be remedied within the ensuing ten year program. Derry should be given the consideration it needs in light of state impact on the local road network. It is also an element that must be reviewed and considered as part of the continuing Master Planning effort by Derry, if for no other reason than to reserve a future right-of-way at this time.

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23

TRANSPORTATION PLAN RECOMMENDATIONS

A town's highway network is often more important to the development of a community than is commonly realized. It governs the patterns of movement for people and goods, adds accessibility inside and outside the town, contributes to the safety and convenience of the community's residents, and strongly affects the success of business and industry. Derry now is following through with the recently completed Road Management Program, and the Town will, in the future, spend considerable capital improvement funds on its highway network. In addition to this, the design and construction of roads and their relationship to underground utilities affect the cost of maintenance of roads and underground utilities.

Often, one can relate the condition of streets and roads to the condition of a town's neighborhood and area. Good, well-kept streets often provide an incentive for keeping up properties, while poor streets are often a contributing element to a property's detriment. The Town's image is also reflected by its roads in other vital ways. Visitors and newcomers (potential residents or investors) often gain their first (and often lasting) impression of the Town as they drive or ride over the roads to downtown or outlying, more rural sections.

Derry's recent growth has taken place around an existing street pattern. It thus became a governing factor in development and the direction of growth for the community; and it has greatly contributed to the community's present pattern. Therefore, it is reasonable to develop a road system for the future that is designed to shape the future community and its layout in general. A road layout not only affords

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access, but oftentime governs the size and shape of lots; and it channels growth and regulates location and density of growth through the adequacy or inadequacy of access which is provided.

On a larger scale, the highway system in a town should serve through traffic on a separate basis from local and service traffic. Proper design can eliminate and avoid conflicts between the traffic needs of a community, the region and the State. Through proper planning, street systems can provide a means of coordinating the types of traffic and the land use areas they will serve. It is wise to develop a classification system to provide for a future road pattern that is designed to serve the community and its land use plan. The Highway Plan makes recommendations to upgrade certain existing streets and provide for off-site construction where they become necessary, in accordance with the Highway Plan and appropriate state classification standards. This will give needed, improved access to outlying areas in the community, separate local from through traffic, and identify functions for which the streets are actually designed and built.

Marginal Access Locations

For purposes of accommodating high traffic generators on existing roads, access should be controlled through site plan administration.

The Master Plan has designated those critical as areas in need of "marginal access roads".

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Proposed Street Classification System

The system was developed, in part, in consideration of the recently-completed road management program. In it, five classifications were established. However, this seems to be excessive, taking into consideration Derry's projected densities and needs to the year 2000; and a modified highway classification has been established. The proposed classification system includes:

- 1) Service Roads,
 designed primarily to serve abutting properties.
- Collector Streets, designed to handle heavier traffic volume than service roads, and carry up to 5,000 vehicles per day, depending on their function and location; can serve abutting properties, but their primary function is to link service roads with arterial highways.
- designed to carry traffic in excess of 5,000 vehicles. (In some instances, such as Broadway, these roads are already carrying approximately 25,000 vehicles annual average daily traffic.)

This recommended classification system ties in with the Town's subdivision regulations which have set forth arterial streets, collector

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This recommended classification system that in with the Town subdivision regulations which have set forth arterial streets, collectors

streets, and minor streets together with their recommended standards.

It is recommended that the following roads be designated as:

ARTERIAL* (25.2 miles):

1) Tsienneto Road, 2) Folsom Road, 3) a portion of No. High St.,*
4) Hillside Avenue, 5) Dickey Street and Valley Street, 6) Aiken Street, 7) South Avenue to Birch Street,** 8) Birch Street, 9) Manchester Road, 10) Rockingham Road, 11) East Broadway, 12) West Broadway, 13) Route 28 & Route 28 Bypass, 14) Hampstead Road, and 15) Route 102 - Chester Road.

COLLECTOR (27.5 miles):

1) English Range Road from Route 28 Bypass to Pingree Road; off-site location paralleling English Range Road and No. Shore Road to Cross Road (app. ½ mile), 2) Cross Road, 3) Adams Pond Road, 4) Floyd Road; off-site location improvement between Floyd Road and Lawrence Road; off-site location improvement between Lawrence Road and Frost Road crossing Londonderry Turnpike, 5) Frost Road, 6) Island Pond Road, 7) Brandy Rock Road, 8) Gulf Road, 9) Loop to be established for relief of traffic circle, consisting of western portion of Island Pond Road and Cemetery Road, with off-site improvement between intersection of Island Pond Road, Cemetery Road, and Pond Road, 10) Olesen Road, II) Olesen Road Extension to Island Pond Road,

10) Olesen Road, II) Olesen Road Extension to Island Fond Road, 12) Warner Hill Road, 13) Bartlett Road, 14) Kendall Pond Road,

15) Fordway Extension & Fordway, 16) Windham Road, 17) Pingree Road, 18) Old Auburn Road, and 19) Back Chester Road.

The remaining roads are classified as service roads (89.6 miles).

Bypass 102 consideration

Over 20 years ago, a bypass was under consideration. It is still an issue. It is particularly so because of the unprecedented growth that Derry has recently experienced and because a State Highway

^{*}See Transportation Plan Map.

streets, and minor streets together with their recommended standards.

ASTERIAL* (25.2 miles):

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La chester Road, 10) Rockingham Road, 11) East Broadway, 12) West
Broadway, (3) Route 28 6 Route 28 Bypass, 14) Hampstead Road, and
15) Roate 107 - Cheeter Road,

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See Transportation Plan Map.

Route 102 is serving a large portion of the southeastern New Hampshire area of growth. It is again recommended that the Town of Derry seek State participation towards the relief of Derry's heavy congestion along Broadway and towards the resolution of the inadequate road network that 102 renders. It is recommended that the Master Plan incorporate a combination of Alternate 1 and 2 of the SNHRPC Transportation Plan for Derry for incorporation into the State's Highway Improvement Program and the Town's Master Plan.

The Transportation Plan includes recommendations that the Town initiate action on Phase I by improving Hillside Avenue and linking it with North High Street then embarking on improvements for Ross's Corner, Folsom Road, and Tsienneto Road.

Phase II of this program would be the provision of an interchange with 93 and the 102 Bypass started under Phase I. (This differs somewhat in detail from the Transportation Plan recommendation prepared in 1985 by the Southern New Hampshire Planning Commission.) In principle, it supports the Town's initiative for long-range improvements on the Bypass with a recommended \$3.5 million in Town and State funding program.

Phase III would link Route 102 with Interstate 93 via a new interchange in Londonderry.

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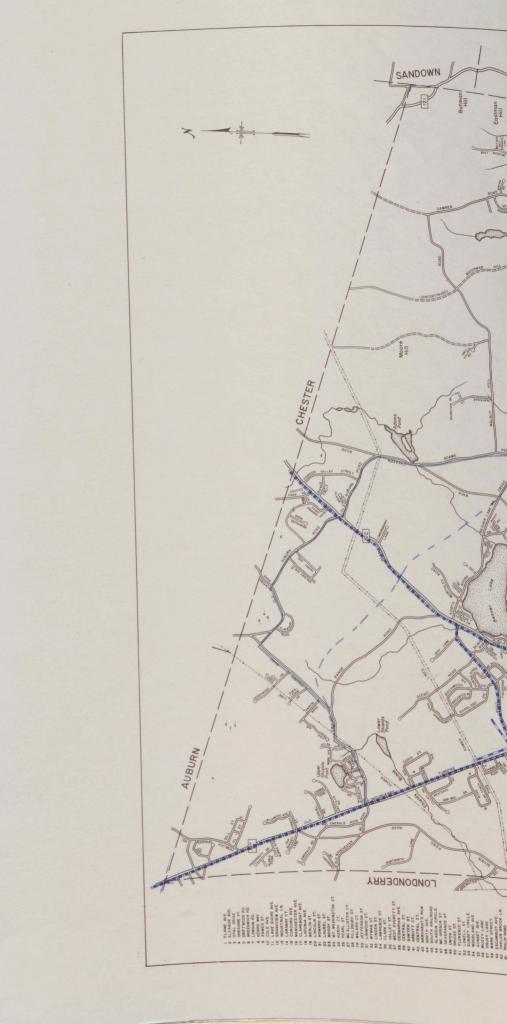
phase III would link Route 182 with interestate 22 Via a new interestance in Landonderry.

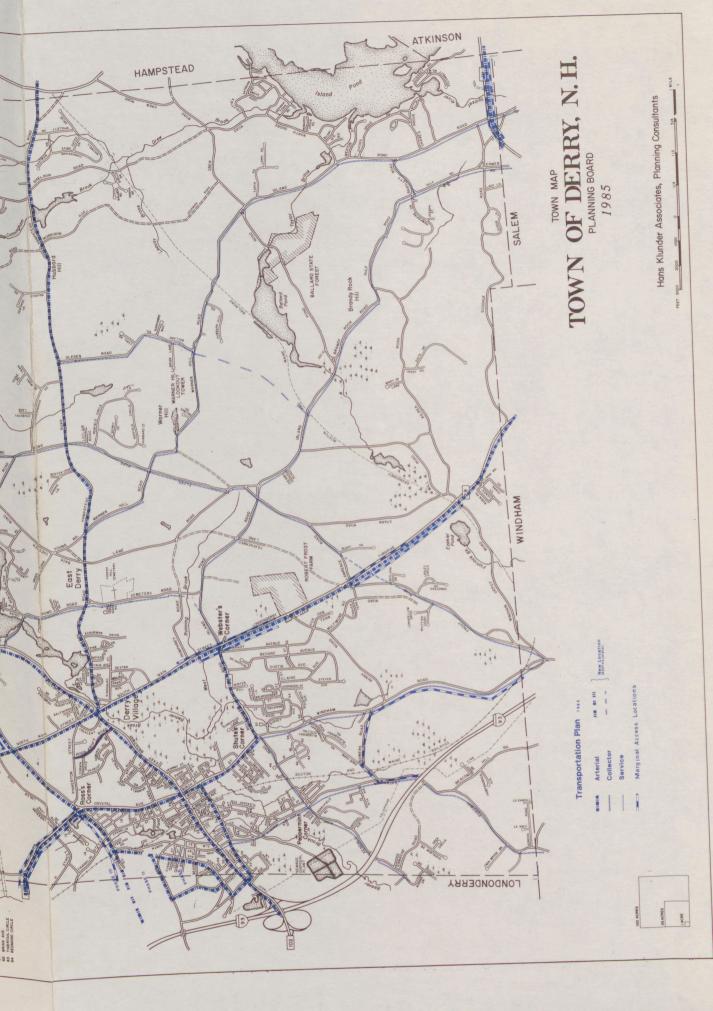
Street Construction Standards

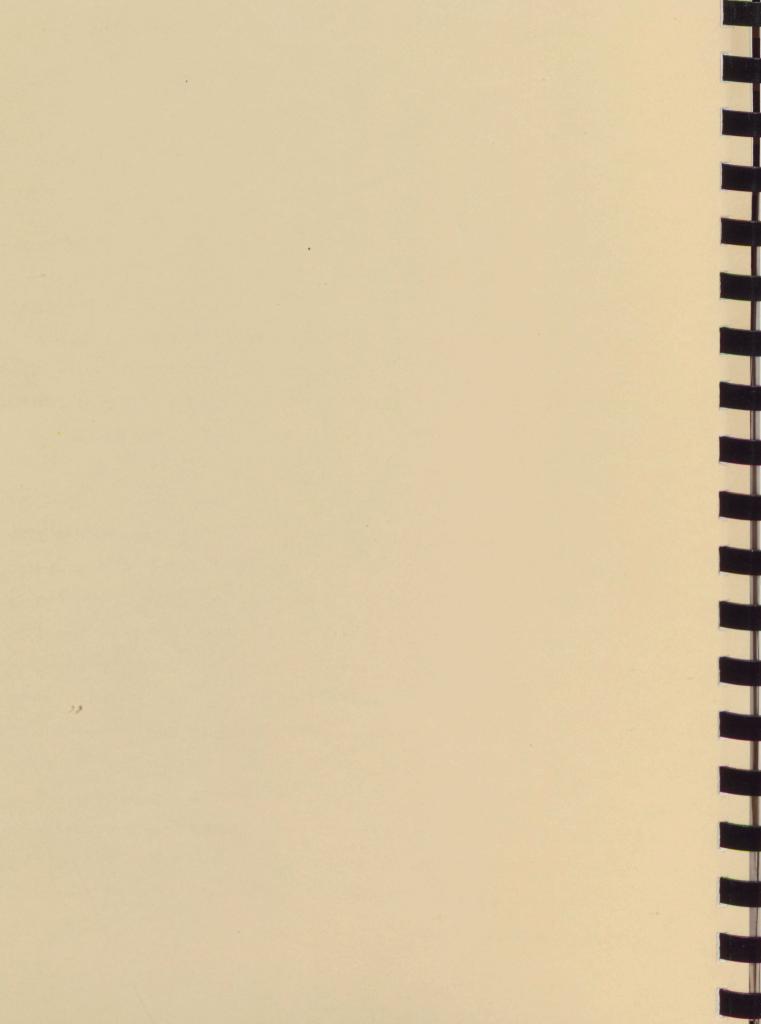
It is recommended that the Planning Board require, where appropriate, increased standards for collector roads, particularly on off-site locations. As the Planning Board begins to consider impact fee requirements as part of subdivision approval minimum standards as set forth in subdivision regulations Section 4:1A14a-v should be amended to increase the collector street width requirements to 66 feet, to require additional rights-of-way for intersections between collector streets and arterial streets in order to facilitate turning movements, and to require sidewalks on one side of all collector streets.

Scenic Roads

In keeping with the community goal to retain a "small-town" atmosphere, those roads still scenic and beautiful should be preserved. Such roads as Drew Road, portions of Cemetery Road, and Kilrea Road are just as scenic as Stark Road, English Range Road, and Mill Road. It is recommended that the Town Council establish a Scenic Roads Committee whose charge it will be to identify scenic roads and vistas. The Council should then review the recommendations and, if appropriate, adopt measures for the protection of these roads and vistas through easements, setbacks, and/or landscaping requirements along these roads.







SECTION VI

UTILITIES

Sewer Services

Even prior to 1920, the Town of Derry provided a sanitary (although combined with storm water) sewer system. When the initial treatment facilities were installed, it expanded this system. By 1975 approximately 6,200 of the total population was connected to sanitary sewer. Since then Derry's growth has taken place in the outlying and rural areas; and presently approximately 11,000 of Derry's population is being served by private and/or individualized septic tank and sewage disposal facilities.

Public utilities in Derry have been continuously updated, renovated and replaced to bring the system up to date. The treatment facilities presently treat an average of 1.5 million gallons of waste water discharge daily. With the additional Environmental Protection Agency ("EPA") funded lagoons, the Town's treatment capacity will be increased to an average daily capacity of 4.2 million gallons per day. Peak flows in the spring sometimes result in infiltration and inflow into the system of up to 4 million gallons per day. With the expansion, 4.2 million gallons per day can be treated; and the system can be expanded into areas of dire need by extending trunk lines and interceptors into areas presently experiencing sewerage need. The Town is presently operating with two major interceptors in the Horne and Beaver Brook basins. These are capable of handling additional services and laterals once the treatment facilities are expanded to assume greater waste water flows.

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Since the preparation of the 1976 and 1977 studies, the Town of Derry has increased by approximately 8,000 people. Many of these are not served by a public sewer system. However, long-range planning efforts should take into consideration the coordination between land use and facilities planning. This coordination is necessary to maintain a sanitary environment and to provide for densities commensurate with systems capability.

Water Services

The serviced portion of the Town of Derry today consumes approximately 1.3 million gallons of water per day. This water supply comes from the Manchester Water Works as a result of a recently- negotiated contract. This assures the Town of an adequate water supply in terms of quality and quantity. A recently-constructed stand pipe provides an additional two million gallons of storage and pressure facility in the north end of the system. This two million gallon stand pipe is in addition to the half-million storage tank east of Route 128 Bypass in the vicinity of Pembroke Drive. The Derry water system is continuing, under the new Public Works Department, to update the water system and increase the size and the pressure in order to increase residual flows. The current contract allows the Town to draw 2.1 million gallons/day from the Manchester Water Works. A potentially new source is being investigated by Manchester Water Works to further ensure adequate supply for the future.

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Private Water Systems

The Town of Derry today, in addition to its Water Department, has 26 individual water systems that come under the jurisdiction of the Water Supply and Pollution Control Commission of the State of New Hampshire. Many of these are franchised water systems; some are association water systems; some are private water systems. They include such water systems as Maple Hill Acres, Oakwood Terrace, Old Crest Estates, Redfield Estates, the Damren Road Condominiums, Farmstead Acres, and such small individualized systems as Kiwania Day Camp, Robert Frost Farm and Nancy Webster's Kindergarten. Overall, there are 26 individual systems throughout the community of various sizes, various numbers of customers, and mains of various sizes (most under 4" in size)*.

Utilities Needs

- 1. The need to coordinate land use and Master Planning efforts with those of Derry's Water Department. The need to coordinate the Highway Department's reconstruction programs with water line updating and upgrading.
- 2. The need to identify individual water systems and their:
 - a. storage,
 - b. size lines,
 - c. capacity, and
 - d. source and flow.

*State of NH Water Supply Pollution Control Source (Summer, 1985).

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UTILITY CONSIDERATIONS

1. Derry's Water System Plans

The Town of Derry does not have, as some communities, a water supply shortage because of its contract with Manchester. It does, however, have identifiable deficiencies within its system. The ever-increasing population has not taken place without incurring tangible problems that need to be addressed, particularly in the service area within the water system. Problems within the water system are two-fold. The first problem is the need to expand the water system into additional areas, and the second is to overcome the deficiencies of residual pressure resulting from inadequately-sized transmission mains and insufficient water pressure for some areas because of the low stand pipe elevation.

Recognizing these deficiencies, the Town of Derry has, through its Public Works Department and Mr. Alan Swan, Utility Coordinator, carried out studies with the assistance of a consulting engineer. These studies have pointed out several identifiable problems and suggest recommended solutions.

Specific areas of concern are Sunset Acres, the South Range School area, and the development around Tiger Tail Circle. These areas have, at best, 30 lbs. of static pressure. During heavy demand periods, this pressure will be insufficient due to inadequate surface elevation. The elevation of the reservoir at 421' and an elevation of 350'-360' for water demand areas, coupled with the distance and resultant friction, produce residual pressure inadequate to serve

UTILITY CONSIDERATIONS

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these areas in times of need. According to the engineer's report, a fire flow at the Fairways would result in a -0.96 PSI at the South Range School, -11.8 PSI at Tiger Tail Road. While a fire flow location at Hood Junior High would result in 14.7 PSI, and at the South Range School and Tiger Tail Circle it would result in 10.7 PSI. Since twenty PSI is the acceptable minimum residual pressure, it leaves these areas in considerable undersupply.

In addition, areas located east of the line of Crystal Avenue and Birch Street are identified as critical areas. These include Sunset Acres, the Hood Junior High School area, the Fairways development, and the areas above Hillside Estates development, the Hospital, and fire flow along Fordway and portions of West Broadway.

Water System Improvement Recommendations:

The consultant agrees with the water improvement recommendations stated in the January 30, 1986 letter from DuBois & King, Inc. of Concord, NH. An excerpt of this follows.

"These (proposed) water main improvements, in themselves, would increase the flow capacity. In order to ensure residual pressure, particularly at increased elevations where development is now taking place, a standpipe off Brady Avenue is essential. Such a standpipe would not only increase the fire flow in the southwest quadrant of the service area of the water system, but it would extend the service area and would particularly aid the system to ensure water supply for present and future needs. As indicated in the engineering facilitate a service this would elevation to between 300' and 400'. This generally is that area proposed for medium density, high density, urban density and industrial and prime commercial development for the Town of Derry."

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RECOMMENDED IMPROVEMENTS TO THE DERRY MUNICIPAL WATER SYSTEM*

1. Replace the 6" line along South Main Street between Kingsbury Street and Dexter Street with a new 12" line. This will provide a continuous 12" main from Chester Road to Fairways.

Estimated Length: 1,750 Feet

2a. Add a 10" line along Hood Road, from East Broadway to Perley.

Estimated Length: 850 Feet

2b. Add an 8" line along Perley, from the end point of the existing 8" line to Hood Road.

Estimated Length: 150 Feet

2c. Add an 8" line along Lenox Road, from the end point of the existing 6" to Hood Road.

Estimated Length: 150 Feet

2d. Add a 12" line along Hood Road, from Perley to Grinnell Road.

Estimated Length: 550 Feet

3a. Replace the existing 4" and parallel the 8" line along Oak Street, from East Broadway to Wilson Avenue, with a new 12" line.

Estimated Length: 1,150 Feet

3b. Add a 12" line cross-country from Wilson Avenue to the intersection of Pierce Avenue and Parkland Drive.

Estimated Length: 1,000 Feet

3c. Add a 12" line cross-country from Pierce Avenue and Parkland to the north end of Sunnyside Lane.

Estimated Length: 1,650 Feet

4. Add a 16" line along Sunnyside Lane from Rockingham Road to the junction of the two cross-country lines. The existing 8" line along Sunnyside Lane would remain in place.

Estimated Length: 850 Feet

*Source: Dubois & King report, March, 1986.

RECOMMENDED IMPROVEMENTS TO THE DERRY MUNICIPAL WAYER SWETE

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Estimated Langth: 850 Feet

Source Dubois & King report, March, 1986.

2. Derry's Sewer System Plan

Town planning, particularly in urbanizing areas, provides the opportunity to coordinate public water supply and public sewer services. It is a good policy, before a public water system is installed (or in conjunction with the water system), to have a public sewer system established. Because people can draw more water through a public system, the increased wastewater discharge from households and businesses is not only noticeable, but significant. Individualized septic tank facilities are then prone to be more overburdened and inadequate, resulting in unsanitary and unhealthy conditions.

The Town of Derry's recently funded program to develop two new lagoons and have them operable by late 1987 provides for an additional 3.1 million gallons a day of discharge to be treated. This would give the Town an overall treatment capacity of 4.0 million gallons per day. It must be recognized that not all of this is wastewater, but some (up to 5% - 10%) would be infiltration and stormwater inflow. This new addition would mean that the Town would nearly triple its capacity to treat its wastewater, from the present daily average of 1.2 million gallons to approximately 4.2 million gallons per day. While present plans would provide for the basic installation of the treatment facility, there are ancillary improvements necessary. In addition to interceptors, trunk lines, and lift stations, it will require an increase in pumping capacity between the lagoon systems and the Merrimack River.

Many of the improvements now being carried out are in conformance with the Wastewater Treatment Works Plan for the Public Works Department drafted by Environmental Engineers, Inc. in 1976. In addition to authorizing the construction of the two additional lagoons,

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In form of Derry's recently funded program to develop two new lagoons and have them operable by late 1937, provides for an additional 3.1 million gellons a day of discharine to be treated. This would give the Town an overall trootment capacity of \$.8 million gellons per day. It must be recognized that not all of this is wastewater, but some lop to \$8 - 183 would be inflitted and stormwater inflow. This new addition would mean that the Text mound nearly triple its repacity to ceat its wastewater, from the present daily average of 1.2 million gellons to approximately \$.3 million gellons per day. While present their sealed for the basic installation of the treatment facility. Others are ancillary improvements measured in the treatment facility. Others are ancillary improvements measured in the treatment facility countring capacity between the lagoon systems and the Marrimack River.

Many of the Improvements now being carried out are in conformance with the Wastevater Treatment Works Place for the Public Works
Department Idrafted by Environmental Engineers; Inc., in 1976, the construction of the few auditional Isosoms.

the Town has now undertaken measures to reduce inflow and infiltration of stormwater into the sanitary system. This has slightly increased the Town's capacity for wastewater treatment.

The Town, continuing its follow-through of recommendations in the 1976 study, now is programming plans for the incorporation into the sewer network of the area north of Berry Road, which includes the Sunset Acres area, and those areas adjacent to and west of Windham Road located north of Bowers Road. Additionally, it plans to include Service Area 11 (northern area including East Derry and adjacent to Hampstead Road) and Beaver Lake and its general drainage basin. These were the priorities recommended in 1976 and to be carried out between 1980 and 1990.

One significant area missing is the area north of Ross's Corner, west of Bypass 28, and east of Route 28. It is the area that falls within the Shields Brook drainage basin and surrounds the powerlines in the vicinity of Scobie Pond Road. For land use planning purposes and purposes of incorporation in the Master Plan, this consultant recommends that this area be considered of the highest priority to lay the ground work for the Town's economic development endeavors.

3. Other Considerations

The Town does have within its boundaries several privately franchised water systems. These have been, to some extent, acquired over a period of time by Southern New Hampshire Waterworks. This acquisition program will result in franchises for portions of the Town of Derry. There are proposals underway for establishing a separate water system with individual private water systems under the auspices of Southern New Hampshire Waterworks. In particular, a higher ground

the Town has now undertaken measures to reduce inflow and infiltration of stormwater into the sanitary system. This has slightly increased the Town's capacity for wastawater treatment.

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elevation that facilitate an enlarged service area and service quality, especially in the north-easterly portion of the community. Such a measure should be taken into consideration in the formulation of Plan recommendations, particularly where off-lot water services are concerned. Again, it must be kept in mind that the provision of water is only one aspect of community services and utility services. There are other services that are necessary to support increased high density developments, especially wastewater.

For short range considerations, the Town is well advised to prevent premature developments that would result in inadequate treatment capacities for wastewater by the Town. Until such time as this situation has been remedied, in fact, the currently proposed moratorium by the Town appears to be a good measure.

4. Proposed Service Areas and Priorities

The Town's Facility Planning Study, prepared in 1976, indicated various areas to be served by a public sewer system. These areas were identified by Priority 1, 2, and 3. Priority 1 was proposed for 1980–1990; and Priorities 2 and 3, between 1990–2025. Consideration of this Comprehensive Plan Study and its impact on future land use decisions must also incorporate those areas of highest priority to be serviced. These areas include the following and are shown on the Utilities Map:

- . 1. The Beaver Lake area,
 - Derry Village between Beaver Lake and the Traffic Circle,
 - East Derry (that area near the library and the East Derry Fire Station),

elevation that facilitate an enlarged service area and service quality, especially in the north-easterly portion of the community. Such a measure should be taken into consideration in the formulation of Plan recommendations, perticularly where off-iot water services are concerned. Again, it must be kept in mind that the provision of water is only one aspect of community services and utility services. There are other services that are necessary to support increased high density developments, especially wastewater.

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- . The Beaver Lake area,
- 2. Derry Village between beaver Lake and the Traffic Circle.
- 3. East Derry (that area near the library and the East Derry Fire Station),

- 4. The development area in the southern portion of Derry, bounded by Windham Road to the west, Berry Road to the south and Route 28 to the east,
- 5. The area north of the existing Industrial Park on

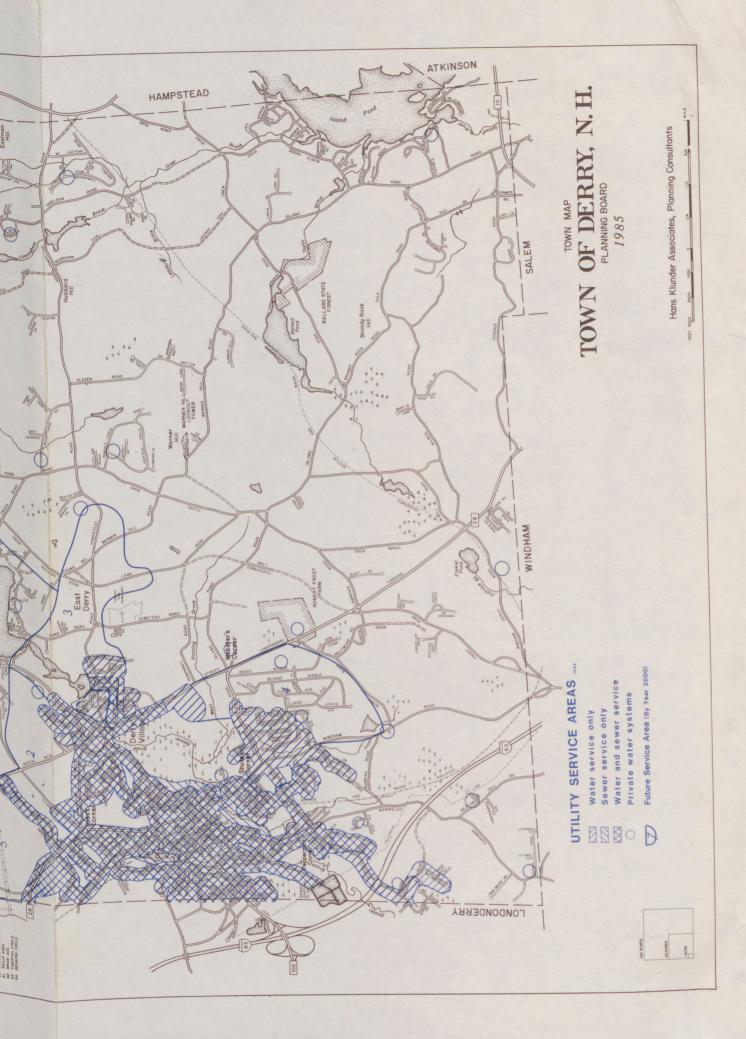
 Manchester Road, Route 28. This includes Franklin St.

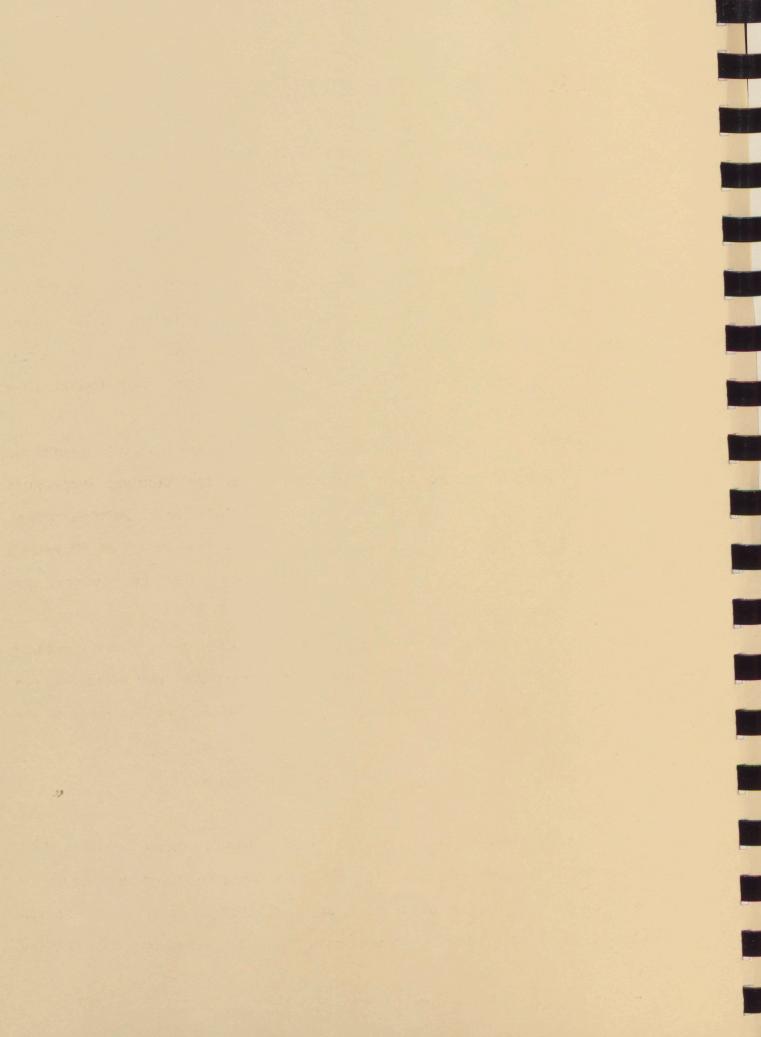
 Extension, lower portion of Scobie Pond Road, and the identified "Industrial" area on the Proposed Land Use

 Map. (Considered High Priority because of its industrial development potential for economic growth.)

(The Planning Board proposes these improvements to the Town Council for incorporation in the Capital Improvement Program and Budget process and overall Sewer Improvements Program, scheduled to begin between 1986-1990.)







The following is an inventory of community facilities for the Town. The study includes public improvements, buildings, and lands.

Town Offices

The former U.S. Postal Service Building accommodates the Mayor's Offices and some administration offices. This structure is located in the center of Town at the corner of Broadway and Crystal Avenue and serves the Town well, considering that the building was originally designed for a different function.

However, several municipal functions are carried out elsewhere. Public Works is located at 40 Fordway, as is the Building Inspector's Office, Department of Health Office, the Code Enforcement Administration, Electrical and Plumbing Inspection Office, and the Office of Planning. These services are also carried out in a building that was designed for other purposes.

The Town relies on the Adams Memorial Building to provide meeting room facilities, which means "doubling up" with others; and recreation has its headquarters at the West Side Community Center (soon to move to the Veterans Memorial Hall).

Municipal Court

The Municipal Court is housed in the historic Adams Memorial Hall. This is located on Broadway and, with some adaptation and renovation, is serving well. It is evident, however, that changes have been made at Adams Memorial Hall; and there should be an evaluation relating the The following is an inventory of compunity facilities for the Town.

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adaptations of this historic structure to continually changing governmental use.

Police Department

The Police Department (one of the praised municipal services in the community per the Citizen's Survey) has recently moved to a modern, up-to-date and adequately-sized facility at a location near Ross' Corner. It provides 24 hour service and, with the excellent communication facilities located there, Derry is well provided for.

Fire Protection

East Broadway, and the original fire station, located on West Broadway in the center of West Derry. Facilities and men are also provided at a station located on the corner of Warner Hill Road (Island Pond Fire Station). Fire protection has recently been placed under Town Government as a Fire Department. This department performs an excellent function in the community with a well-trained staff as indicated in the recent Citizen's Survey.

In addition to the Fire Department mentioned above there is the East Derry Fire Department full-time fire protection service located in East Derry on Hampstead Road.

Ambulance Service

Derry Ambulance Service is capable of providing a level of Advanced Life Support. It has trained paramedics on duty 20 hours/day.

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Ambulance Service

Derry Ambulance Service is capable of providing a level of Advanced Life Support. It has trained paramedics on duty 20 hours/day.

Rescue Squad

Derry's Search and Rescue Squad is equipped to handle underwater rescue and ambulance and rescue services.

Communications

The Fire Department and Ambulance Service are linked with a 24-hour communications system in the alarm room at the central Fire Station. This dispatching service serves the Town of Derry and renders ambulance communication for Londonderry, fire and ambulance communication for Chester, and fire, ambulance and rescue for Auburn and for Hampstead.

Public Works Department

The Public Works Department is responsible for the maintenance of streets, sidewalks, sewerage (including the treatment plant), water system, parks, cemeteries and parks. Headquarters are located at Fordway, as is the equipment garage and maintenance facilities. This location also provides for salt storage, sand storage, and storage of culverts, pipes, etc.

The Public Works Department is also responsible for the solid waste disposal. It is now in the process of closing the landfill, supervising and monitoring maintenance in the meantime. Alternate means for solid waste disposal are presently being planned. This would provide for a refuse-to-energy incineration plant privately constructed and used by Derry on a contract basis. The planned location for this facility is near the Town's sewage lagoons off Fordway.

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Town Libraries

The Public Library is located on Broadway and is rendering the community a service that needs to be improved (even with Taylor Library) because of the influx of population.

Derry has a shortage of space which needs improvement. Based on the librarians' and Trustees' assessments of townspeople's demands, additional volumes and space to house these volumes, additional meeting room facilities, and approximately 15,000-20,000 square feet of additional space are a necessity. This need is now under study by the Library Trustees.

School Facilities

Derry's school facilities (under the auspices of the Derry School District) consist of:

The Derry Village School (capacity of 600),

The Floyd Elementary School (capacity of 160),

The Grinnell School (capacity of 600 by Fall, 1987), and

The South Range School (capacity of 425).

In addition, there is

The Hood Junior High School (capacity of 800-850).

The 1984 report of Mr. Brown, Superintendent of Schools, indicates a tangible shortage of classroom space on the local level. Overall, in 1984, the Town had a tangible shortage of classrooms, which, combined with rising population growth, will worsen. Therefore, the voters in 1985 have authorized construction of a new elementary school facility in the central portion of the community.

While this construction will resolve the immediate needs on the elementary level, Pinkerton Academy is in need of help in meeting the high

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While this construction will resolve the immediate needs on the clementary level, Phytogram Academy is in need of help in meeting the high

school enrollment needs of the community. Pinkerton Academy is a private educational facility, contracted by the Town of Derry and adjacent communities. Here, too, a shortage of classroom space is evident, and this need must be addressed. The contract is up for negotiation; and as the Citizens' Survey indicates, there is a general satisfaction with Pinkerton Academy's performance. Pinkerton Academy should address the classroom shortage in order to continue to provide excellent educational services to the Town of Derry and its residents.

Community Facilities Needs

- 1. Town Office Facility There is a need for a municipal administration facility. This facility should be adequate to house a council chamber, administration offices, and committee and citizens meeting rooms. A continuing Master Planning effort should aid, not only in the evaluation of the municipal building needs, but with a study of location for a government center for the Town of Derry.
- 2. Adams Memorial Hall This historically significant hall, which has adequately served the community for decades, has continued this service since its restoration after a devastating fire. With adaptations it could serve as a community center, courthouse and site for historic artifacts. Its location and unique architecture favor these improvements.
- 3. Public Works Department Presently, the Town of Derry is operating an important governmental function out of facilities that are

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Public Works Department - Presently, the Town of Dairy is operate

outdated and costly to maintain, and operate. There is a need for modernizing the Public Works headquarters, not only the garage and maintenance building, but the offices as well.

- Town Libraries On recommendations from the Librarian and the Trustees and observations made by this consultant, the Town Plan proposes to incorporate actions to solve the need for new or expanded library facilities and functions.
- 5. School Facilities While the Town of Derry has recently authorized the construction of a new elementary school, the need for expanding its secondary school facilities under a contract with Pinkerton Academy should receive early and prompt attention.

Citizens Response to Questions Regarding Community Services and Facilities

The citizens' ratings regarding the adequacy, or the lack thereof, of community facilities and services in response to the recent Citizens' Questionnaire Survey can be found in the Appendix.

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COMMUNITY FACILITIES PLAN

A. Schools

This consultant has reviewed, with members of the Committee and Superintendent Brown, the Building Needs Committee Report of 1984. That report evaluated the adequacies of present facilities, incorporated standards developed by the School Board, and developed and provided from this, based on School enrollment projections, additional classroom and central facility needs. The recommendations set forth were based on an analysis of space problems, present and future needs determined through enrollment projections, and the determination to "furnish economically realistic, long-range solutions to the school problems".*

The following aspects were addressed:

- 1) Land acquisition,
 - 2) Current building and land use, and
 - 3) School enrollments and projections.

The recommendations to be incorporated into the Master Plan, based on projected enrollments and capacities, include construction of the following:

- A new 600 seat elementary school with appropriate central facilities,
- 2) A 300 seat addition to the Grinnell School, and
- 3) A 600 seat middle school in the long-range picture by approximately 1993.

In addition, the Needs Committee recommends that "four existing

^{*}Source: Building Needs Committee Report, 1984.

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In addition, the Meeds Committee recommends that "four existing

Source: Building Needs Committee Report, 1994;

elementary schools and Hood Jr. High be upgraded over the next six years in such a way that classroom and core facility capacity be approximately matched." The Committee further recommends:

- 1) "Enlargement of Grinnell cafeteria and kitchen to meet the needs of an additional student capacity.
- 2) Reduction of classroom capacity by appropriate number in the

 Derry Village School and South Range School in order to expand

 core facilities and/or address the need for space for art, music

 and special services.
- 3) Reduction of classroom capacity by one classroom, and possible modification of educational program at the Floyd School.
- 4) Reduction of classroom capacity by seven classrooms, which is the present sixth grade at Hood Junior High School, in order to expand core facilities, i.e., shop, home economics, music and computer facilities."

The following three-phased program is recommended by the Needs Committee. This consultant has reviewed these needs in light of population projections for Derry, present and future land use plans for the Town of Derry, and population projections in light of family and household size for Derry.

- Phase I: Construction of a new 600 pupil elementary school. (Now completed.)
- Phase II: Construction of a 300 pupil addition to Grinnell Elementary School (under construction).
- Phase III: Construction of a 600 pupil middle school by 1993, provided school projections hold true.

The proposed Land Use Plan incorporates these recommendations and makes provision in the Land Use Plan for recommended future

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The proposed Land Use Plan incorporates these recommendations

school sites in conjunction with a public lands program and neighborhood community development approach.

It is imperative that both the Planning Board and the School Board correlate their efforts in order to assure that neither overbuilding or a long-range shortage occurs. This will require the continued review of population projections, household sizes, and building activity in the Town of Derry. On review, at present, it appears that population projections and school enrollment projections are realistic and should hold true until the mid-90s.

B. Public Safety

Fire Protection Considerations

Derry's two-tier approach to rendering fire protection and ambulance service to the community has provided the Town, in the past, with one of the best fire protection services among New Hampshire communities. As with many other community services, however, fire protection will be subject to additional needs as developments take place, commercial and industrial expansion occuring west of the Bypass and scattered residential development occuring throughout the community.

Fire Department

Derry's central fire station and substation on West Broadway and Warner Hill Road near Island Pond are rendering services to the west and south portions of the community. This has proven to be adequate in the past. However, foreseeable residential and commercial expansion, particularly along the Londonderry Turnpike, will call for additional fire station needs. It is therefore recommended that the Master Plan include in its Public Lands Program advanced land

school sites in conjunction with a public lands program and neighborhood community development approach.

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acquisition for a fire station south of Lawrence Road in the vicinity of Route 28 (the Londonderry Turnpike).

Taking into consideration the proposed street and highway network for the Town of Derry, a location in the vicinity of Frost Road and Berry Road, south of South Range, would not only render access to Route 28, but to the southwest portion of Derry as well. Such an improved facility, properly manned and furnished with supplies and equipment, would be a sound and logical expansion of the fire protection services rendered by the Derry Fire Department.

East Derry Fire District

This is a facility presently located in East Derry and one in need of further manpower and equipment housing, largely because of the residential expansion that has taken place.

The highest-priority need to meet present and near future demands is in the northwest portion of Derry, within the boundaries of the East Derry Fire District. Taking into consideration the Highway Plan and proposed Land Use Plan, which call for medium- and low-density residential development, as well as industrial development in the west and central portions of Derry, a northern location appears to be most appropriate. A location with ready access to the Route 28 Bypass is clearly indicated to facilitate northwest and southeast travel for the equipment. Additionally, a site accessible to collector streets or, ideally, an arterial road rather than residential service roads would be preferable. Therefore, a location at Pingree Road and English Range Road, with ready access to Route 28 Bypass, appears to be a sound location for such a new facility manned by adequate manpower and equipment to provide the added fire protection needs in the East Derry

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District.

Long-range considerations should incorporate provisions for advanced land acquisition for a fire station site in the eastern portion of Hampstead Road. A location near the Hampstead town line, in the vicinity of Damren Road and Hampstead Road, is one that would appear to serve the fire protection needs of the eastern portion of Derry and could possibly provide fire protection services to that part of Hampstead as well as Sandown and Chester.

C. Town Offices

As the inventory and analysis pointed out, the Town Office facilities today are those that the community had when Derry was half its present population size. The Town falls short in rendering adequate and attractive administrative and municipal facilities. With the recent change in government, the Town Council is in need of a formal Council Chamber and official meeting place. It is around such a core of local government that administrative facilities should be provided. The Master Plan recommends that a Town Office facility be provided in conjunction with a municipal center. Such a Town Office facility should result in the consolidation of the general municipal administration.

On examining town offices of similar requirements in other towns, a building of 10,000-12,000 square feet should be considered for the initial construction. It is recommended, in addition to the Council Chamber, meeting rooms for committees and staff be provided and accommodated in a new building. Fire and police are presently in separate facilities. Public safety administration might well be located in a new town administration building.

District

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Planning and Inspection Departments are presently located at 40 Fordway, along with the Public Works Department. For the convenience of residents and businesses, those services should be located in a new building. Similarly, the Director of Public Works and Engineering should be easily accessible to the Chief Administrator and Mayor of Derry.

Mayoral offices and administrative assistant offices are obvious needs in the Town of Derry in conjunction with a new municipal building. Appropriate ancillary service quarters, such as secretarial, drafting, reception, communications, etc., are necessary additions to be considered in the construction of a municipal building.

With the need for economic development, headquarters for economic and community development and the Housing Authority should be properly housed in such a municipal building. With the need for additional Town Clerk personnel and record keeping, along with tax collection requirements and overall fiscal management needs, facilities for those town functions in a new Town Office building should be provided.

There are some municipal functions that could well remain in their place of activity, such as the Housing Authority presently located in the Adams Memorial Building and the Recreation Administration in the West Side Community Building. These headquarters might well remain in their present offices with only the Directors moving to a central municipal building.

Municipal Complex

Community identity was an issue that was raised in the Citizens Survey conducted by the Planning Board. Additionally, community

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goals addressed the need for a community focal point. It is a recommendation in the Master Plan that the Town provide for a municipal center that provides for additional administrative office space for the town and other community facilities. It is recommended that a detailed Master Plan for such a complex be developed by the Planning Board and/or a special study committee soon.

With this in mind, the Master Plan makes the recommendation for the acquisition of a large (approximately 50 acres) parcel near the geographic center of Town for a municipal center.

D. Public Works

Under the Department of Public Works come sewer and water, discussed in a separate portion of the Master Plan. It also is responsible for maintenance of town properties, streets and highways, and sewer and water improvements, engineering review and solid waste.

Town Garage Facilities

The Town has a large investment in its Public Works Department equipment. The Town Garage, recently adequate to handle the equipment, is now falling short of garage space for the equipment since it has to accommodate storage space, lunch rooms, offices, parts and storage. It is recommended that an ell be added to the existing Town Garage with offices, lunch rooms, etc. provided in the "heel" of the ell. Such an ell would extend from the present building along the fence line towards the diesel pump.

Salt and Sand Storage

The recent addition of a salt and sand storage is expected to meet the needs for the Town of Derry for the foreseeable future.

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E. Solid Waste Collection and Disposal

The Town's already marginal solid waste disposal site is subject to closing, and the Town is in the process of developing alternate means of solid waste disposal. As a result of a series of investigations, the Town of Derry is engaging in contracting for a solid waste-to-energy conversion program. This means the establishment of a generating facility fired with solid waste. The solid waste would be collected by the community and would be run through a sorting for recycling process with burnable waste converted to gas to create energy for electricity.

The recommended site is on the Town's land west of Fordway in the vicinity of the present construction for the expanded sewage treatment facility. This measure is an appropriate step in resolving the community's solid waste disposal needs. While it will remain the responsibility of the community to furnish a transfer station, it would be a private contract that provides the service of solid waste-to-energy plant.

F. Town Library Facilities

The Town Library facilities are, as pointed out earlier, inadequate. A new library or expansion of the present library has been
under consideration over the last few years. A delay in construction
or addition to the present library would appear to be appropriate in
light of the municipal complex. A Town Center would not only be a
logical place for a library but it would also be a substantial asset to a
Town Center since the Town Library would complement the Town
Center activities. Here again, the multiplicity of ancillary uses and
interchange of these uses would make a location for the Library, in

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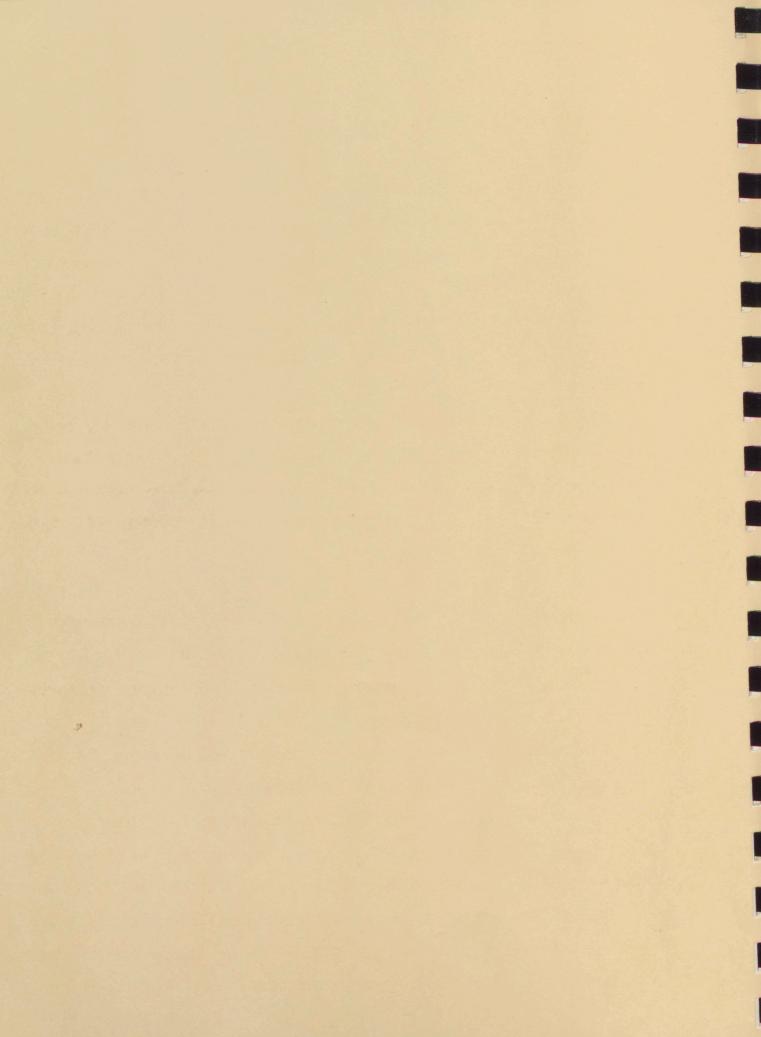
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therefore of west uses would make a location for the Library in

conjunction with the municipal center, a more desirable, economical choice for the Town.

It is recommended that the efforts of the Library Trustees be directed towards participation in a municipal center and that the Town's future library needs be combined with a cultural and performing arts center in the municipal complex.



SECTION VIII A. OPEN SPACE AND CONSERVATION

Derry has alloted to conservation and open space a total of 510 acres. This land includes Hood Park, land areas acquired by the Conservation Commission, Gallien's Beach at Beaver Lake, and smaller parcels scattered throughout the community. Yet in 1985, this falls far short of the 1,270 acres recommended in 1965 and does not make provision for protecting some of the natural areas, rural characteristics and unique and other environmentally-sensitive areas.

The Recreation Map submitted shows areas of present ownership by the community and their relationship to populated areas of the Town of Derry.

Derry's population is now around 25,000, and the Town maintains and operates a Park Program intended for a population of 10,000-15,000. This has resulted in:

- 1. Inadequate community parks, small in size and often not developed.
- Parks that are not readily accessible or adequately equipped for parking, picnicking, ball games, and other family activities ordinarily found in an urban community.
- 3. Limited teenage activities, even with the West Side Community Center.
- 4. Limited access to school facilities for Town recreational use.
- 5. An increasing need for Senior Citizens activities and facilities.
- 6. A linear park or trail system devoted to activities such as bicycle and cross-country skiing, hiking, jogging, etc. (While the Town has recently acquired the Boston-Maine Railroad right-of-way and the State has under its control a railroad right-of-way, an organized effort must be made to make these areas acceptable, useful "linear" park

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activities. Their organized use would require not only off-site parking, but signing and policing.)

A Master Plan for the Town of Derry should make provisions for meeting and, hopefully, exceeding nationally accepted standards. It must also make provision to protect this Town's unique and scenic areas in order to retain the quality of life in Derry. The Master Plan now suggests 50% of the town's land area be left undeveloped. This undeveloped portion should be devoted to recreation, parks, playground, conservation, and an orderly open space, parks, and recreation program for the Town of Derry.

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TABLE 23

RECOMMENDED PARK AND RECREATION SYSTEM FOR LOCAL MUNICIPALITIES

LOCAL/CLOSE-TO-HOME SPACE:

Component	Use Use	Service De Area	sirable Size	Acres per 1000 Population	Desirable Site Characteristics
Mini-Park Neighbor- hood Park	Specialized facilities that serve a concentrated or limited population or specific groups such as tots or senior citizens.	than	l acre or ess	0.25- 0.5 A.	Within neighbor- hoods and in close proximity to apart- ment complexes, townhouse develop- ment or housing for the elderly.
Playground	Area for intense recreational activities, such as field games, court games, crafts, playground apparatus area, skating picnicking, wading pools, etc.	4-½ mile radius to serve a popl. of 5,000+ (a neighborhood)	acres	1.0-2.0 A	Suited for intense development. Easily accessible to neighborhood population-geographically centered with safe walking and bike access. May be developed as a school park facility.
Park	Area of diverse environ- mental quality. May in- clude areas suited for in- tense recreational facili- ties, such as athletic complexes, large swimming pools. May be an area of natural quality for out- door recreation, such as walking, viewing, sitting, picnicking. May be any com- bination of the above, de- pending upon site suit- ability and community need.		25+ - acres	5.0-8.0A	May include natural features, such as water bodies, and areas suited for intense development. Easily accessible to neighborhood served.

Source: Recreation Park and Open Space Standards and Guidelines
National Recreation and Park Association

Conconent Un			
or limited pag			
Neighbor- rood Park/ Nayground Area for inten			
as field games games, crafts, apparatus area			

water bodges, and

OPEN SPACE PLAN RECOMMENDATIONS

As development continues to consume more and more of the Town's land resources, stronger pressure will be applied to use marginal land and land areas that are necessary for the public health, safety, and general welfare. Derry must act now if open spaces and critical land resources are to be preserved. These land areas fall into three categories:

- (1) Open Space for the public use and enjoyment, i.e., public land,
- (2) Open Space because of marginal development suitability, i.e., wetlands and flood plains, and
- (3) Open Space to preserve some of the agricultural land areas in Town, i.e., farm land and scenic areas.

The inventory of land resources showed that 39,284 acres are unsuitable for development. Additionally (projected over 20 years ago in the 1965 Plan), 270 acres should be preserved for public use and enjoyment. It is now that the Open Space Plan should make also provisions for the protection of key farmland to be preserved as agricultural areas, a plan which would also, in part, maintain some of the historic and scenic qualities of Derry.

Among Derry's scenic areas, certain sections should receive additional attention in order to expand already acquired land and add new acquisitions for the enjoyment of residents now and in the future.

These areas should include the following:

(1) Adams Pond -

This area is still relatively undisturbed and lends itself to public use. In conjunction with Moore Hill, it provides a wild life

OPEN SPACE PLAN, RECOGNIENDATIONS

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- brook enable (1)

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area and recreation-open space location in the north central quadrant of Derry.

(2) Ballard Pond -

Pond, but should seriously consider acquisition of additional land in this vicinity. This expanded Ballard Pond Public Area could include such recreation activities as hiking and picnicking and could provide a community focal point in the southeast quadrant of Derry.

(3) Great Island Pond -

The recent Citizens Survey indicated that 782 (over 22%)

Derry residents favored access to Island Pond for the Town's residents. For this reason and the fact that Island Pond is, indeed, a remarkable natural resource within Derry, access to Island Pond should become part of an open space program and long-range plan for the Town of Derry.

(4) Warner Hill -

The highest elevation in Derry, Warner Hill is located in the central portion of Derry. With the acquisition of additional land area surrounding the Fire Tower, Warner Hill could become a central community focal point for general public outdoor enjoyment. This would be in addition to the outstanding vista that Warner Hill already affords.

(5) West Derry Open Space Area -

In West Derry, the only major open space area suitable for active use are the Alexander Carr Playground off Pierce Avenue, Birch Street, and Hood Pond. The tennis courts will take but a

area and recreation-open apace location in the north central quadrant, of Derry.

(2) Ballard Pond

The public has already acquired land at the autlet of Balland Penc, but should sariously consider acquisition of edutional land in this evidently. This expended Balland Penc Public Area could include such recreation acquiriles as hiking and phoniciong and could provide a community focal point in the southeast quadrant

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(5) West Darry Open Space Alton

In West Centy, the only major open space area suitable for eather use are use Alexander Cent Playeround off Pierce Avenue, Birch Street, and Hood Pond. The Lennis courts will take out a

small portion of the land area available. It is recommended that nature trails be expanded and improved and that the ski area be made more accessible and possibly be combined with a summertime slide to provide additional recreational activity for this heavily populated portion of Derry.

Development of Green Belts

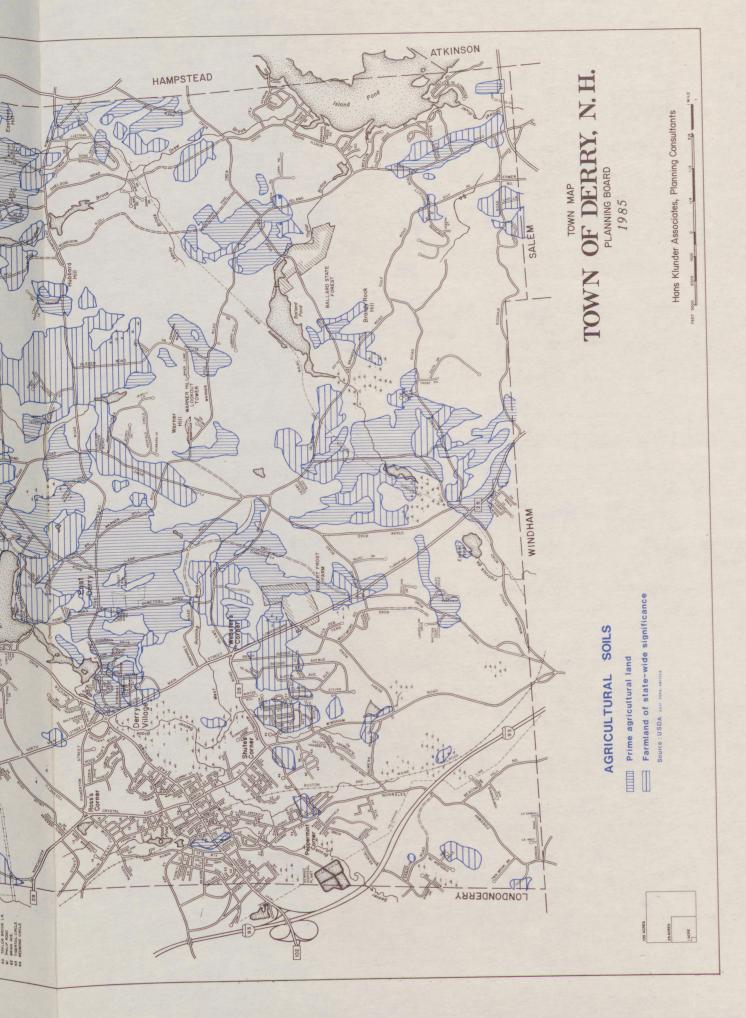
The opportunity still exists for the Town of Derry, through good planning, to preserve green belts along its key drainage areas. In addition to reserving these areas as part of protected flood plains, they would serve a dual function as a green-way system throughout the Town of Derry. These green-ways would measure 200' wide (100' each side of the brooks and along key draining ways) and should be given high priority in any development approval in the Town of Derry. Included would be (the entire lengths):

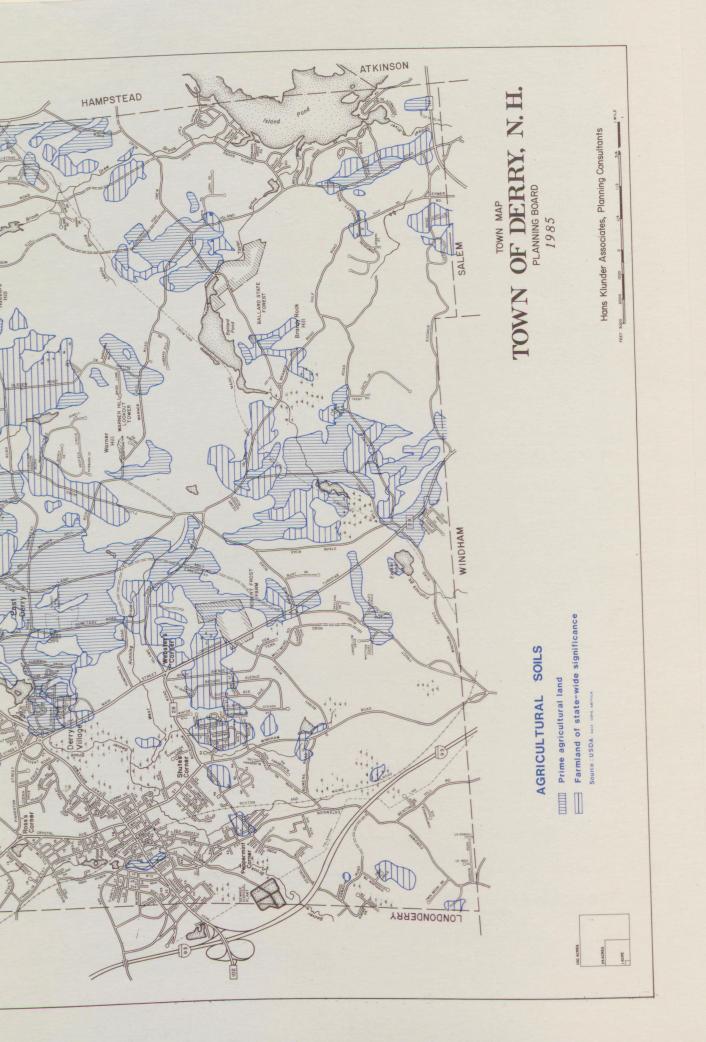
- (1) Beaver Brook,
- (2) Horne Brook,
- (3) West Running Brook,
- (4) Taylor Brook,
- (5) Leavitt Brook,
- (6) Drew Brook, and
- (7) Cunningham Brook

An additional green-way under this system should be developed (along with an open space program) along Upper Shields and Lower Shields Pond (Rainbow Lake) and Shields Brook in the northwest quadrant of Derry.

Properly incorporated in the planning effort now, and made part of the Master Plan, subdivision approval should be required to incorporate the provisions of this greenbelt system - open space program.







B. WETLANDS, AQUIFERS AND AQUIFER RECHARGE AREAS

Large portions of Derry's population depend on groundwater supply, be they small communities or individual wells. For this reason, it is extremely important that Derry undertake measures that will protect this important natural resource for its residents. It is generally acknowledged that wetlands are collectors and replenishers of groundwater resources and aquifers hold and carry groundwater below surface.

One of the important elements is to identify and protect key, prime wetland areas. Not only do they make the environment in Derry attractive, but they are important as they sustain water levels in the ground. The larger the wetland area, the more important it becomes as a groundwater recharge area. These wetlands become particularly significant when they are interconnected because they then become areas that control flooding, prevent erosion, and act as filters to groundwater. The wetland areas identified to date as prime wetland are indicated on the Opportunities and Limitations Map and should be administered in the review process of subdivision regulations.

It is particularly important that those wetlands that are underlain by stratified sands and are identified as aquifer areas and aquifer recharge areas on the Opportunities and Limitations Map be protected. They are the most favorable wetland areas for groundwater resources. the did prevent erosion, and series to cround white the party and and the 23

In Derry there are some wetlands that are indeed interconnected and are of important value to the community's underground water supply. This is particularly true in cases where wetlands are associated with lakes, interconnecting lakes, or following water courses.

In association with the wetlands are the aquifer and aquifer recharge areas. Not through public ownership, but through protection from adverse development should these areas be set aside as a means of providing for orderly development in the Town of Derry.

Further and more detailed investigation is needed to define additional wetland areas and those areas that need to be protected because of their groundwater carrying capacities.

It is the Conservation Commission that can, as part of its Open Space Program, negotiate and acquire rights through dedication, donation, or marketplace acquisition in order to assure the future protection and availability of groundwater resources to areas that are not serviced with a water system drawn from a large source such as a municipal or city water system.

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C. RECREATION

Public recreation facilities and opportunities are an asset to the community. The following report was compiled with the assistance of the Recreation Department and the Master Plan Subcommittee on Recreation. Present recreational facilities are listed and, more importantly, the program making use of these facilities. Derry's Recreation Program is making provisions for programs for young children to senior citizens. Activities vary from accommodating an average of 1,000 people at the Hood Park during the summer months to (when weather permits) ski activities at the Alexander-Carr Recreation Area.

The Recreation Department's report in 1985 states "As our community expands, the demands for services increase accordingly. Our programs reflect this increase in large enrollments of participants and greater number of programs."

As development continues to grow, open space provisions should be made by the community for passive recreation opportunities under a program of advance land acquisition with reference made to nationally accepted standards. (See Table 23, page 110.) Recent rapid growth makes it important to adequately provide for current and future recreational needs with open space programs for the continued and future enjoyment of Derry's residents.

While Derry has done well in providing recreation programs and, at one time, had adequate recreation facilities, today the Town does fall short of nationally acceptable standards for a population of 20,000 - 25,000+ people. The Town seems less supportive of these programs than it was ten years ago.

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TABLE 24

PRESENT PARKS AND PLAYGROUNDS IN DERRY

ALEXANDER-CARR PLAYGROUND - PIERCE AVENUE
 Lodge, main playground, picnic area & play equipment
 Four (4) tennis courts on Birch St. with parking
 Shutes corner picnic area with parking
 Skiing and sledding hills
 Nature trails

Year-round use

2. BUCKLEY FIELD NEXT TO HOOD SCHOOL

Six (6) diamonds (some small for youngest groups)

Two (2) football fields (some fields overlap) One (1) soccer field (some fields overlap)

One (1) field hockey field (some fields overlap)

One (1) tennis court

Kite flying and many special events

After school use and weekends (spring, summer, fall)

3. DERRY VILLAGE SCHOOL

Six (6) diamonds One (1) gym

After school use and weekends plus summer

- 4. GALLIEN'S BEACH AT BEAVER LAKE (to be developed)
 Swimming in summer
- 5. GRINNELL SCHOOL GYM
 Late fall, winter, early spring use when school is out
- 6. HOOD SCHOOL GYM Late fall, winter, early spring use when school is out
- 7. HOOD PARK PLAYGROUND ROLLINS ST.

Two (2) tennis courts

Two (2) basketball courts

One (1) st. hockey rink and some sledding

Swim area, picnic area, play equipment and fishing

Organized summer programs

Nature area

Year round use

- MACGREGOR PARK EAST BROADWAY Year round use (some sledding)
- 9. O'HARA FIELD RAILROAD AVENUE Little League field Spring, summer, fall use

TABLE 28

PRESENT PARKS AND PLAYGROUNDS IN DERRY

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Skiing and sledding hills
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Year-round use

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Kitc flying and many special events

After sectors and westerds (some fields (summer fall))

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One (1) gym

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 Organized summer erograms
 Nature area
 Year round use
 - 8. MACGREGOR PARK EAST BROADWAY
 Year round use (sume sledding)
 - CHARA FIELD RAILROAD AVENUE Linds League field Spring summer fall user

29

10. PINKERTON ACADEMY (Privately Owned)

Five (5) diamonds

One (1) track

Two (2) lacrosse fields - some fields are same Two (2) football fields - according to season

One (1) field hockey field

One (1) cross country course

One (1) gymnasium

After school and weekends plus summer

11. SOUTH RANGE SCHOOL

Two (2) diamonds

One (1) soccer field

One (1) gym

After school and weekends plus summer

12. VETERAN'S FIELD - RAILROAD AVENUE

One (1) diamond with lights

Two (2) tennis courts

One (1) playground

Spring, Summer, Fall Use (with lighting)

13. VETERAN'S HALL - 31 W. BROADWAY
One (1) gym and back-up facilities
Year round use

14. WEST SIDE COMMUNITY CENTER - 39 W. BROADWAY (Privately Operated)

One (1) playground Multiple use rooms

Year round use

15. STATE OPERATED PUBLIC BOAT LAUNCH AT BEAVER LAKE Spring, summer, fall use

RECREATION RECOMMENDATIONS

The Master Plan recommends the preservation of key land areas for recreation activities in the future. It is recommended that the concentration be on both community-wide and neighborhood recreation activities. It is recommended that the central recreation facility be located in conjunction with the municipal complex.

On the other hand, neighborhood recreation facilities are proposed to be located in conjunction with

- 1) the East Derry School,
- 2) a site near Philip Road,
 - 3) a site between Mill Street and Stark Road,
- 4) a facility south of Overlook Drive,
- 5) a recreation facility in the vicinity of Kilrea Road,
- of Island Pond Road and Floyd Road,
 - 7) a recreation facility east of Chester Road,
 west of Back Chester Road, north of the proposed Beaver
 Lake Collector Road facility,
 - 8) a recreation facility east of Pingree Road,
 - 9) a neighborhood facility in the northwest corner of Derry in the vicinity of the newly proposed Overledge Development, off Pingree Road,
 - 10) use of old well sites (off Fordway),
 - 11) a site near Scobie Pond Road off Old Manchester Road.

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 Derry in the vicinity of the newly proposed

 Cvariedge Davelopment, off Pingree Road,
 - (a) use of old well sites (aff Fordway),
 - 11) a site near Scoble Pend Road off Old Manchester Road

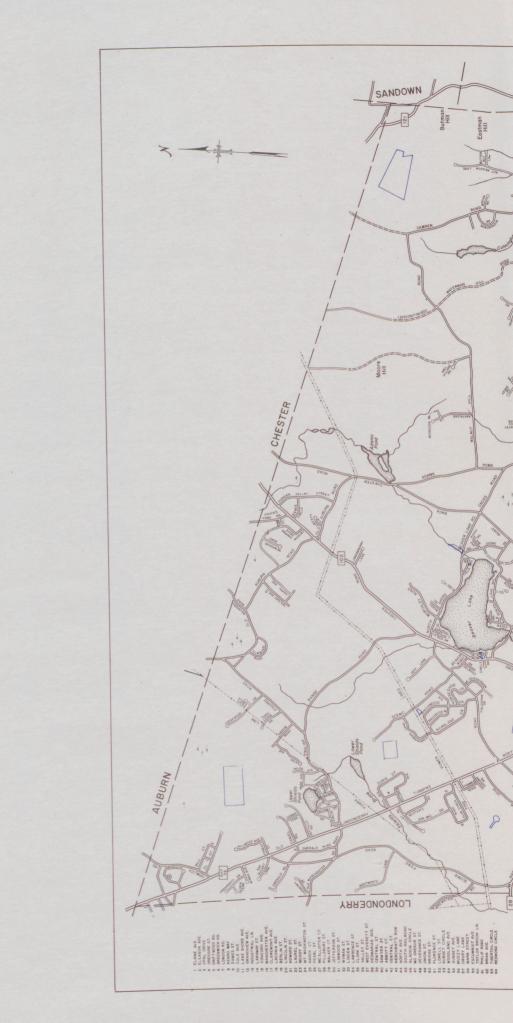
Where appropriate, these recreation facilities could be, in instances, located in conjunction with school activities, in the vicinity of neighborhood parks and central to neighborhoods that are being created and designed as the community develops. Those neighborhood facilities should be created and provided with improvements.

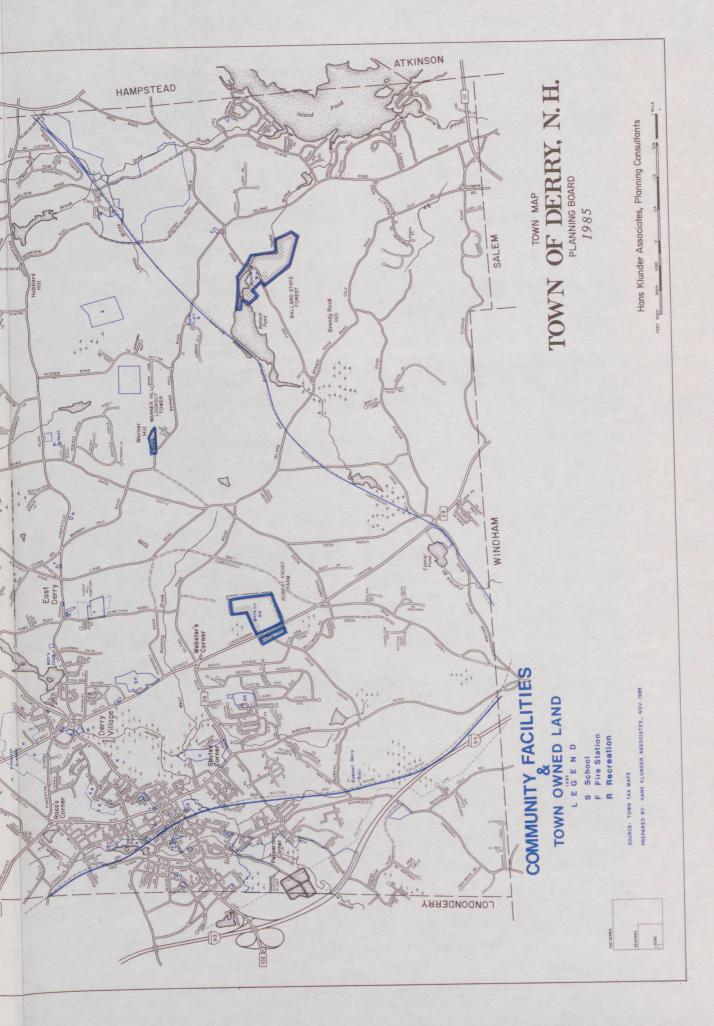
It is also recommended that indoor skating rink facilities and an indoor swimming pool (as part of the municipal complex) be considered to meet community-wide needs expressed in the Public Opinion Survey and recognized as a present shortcoming.

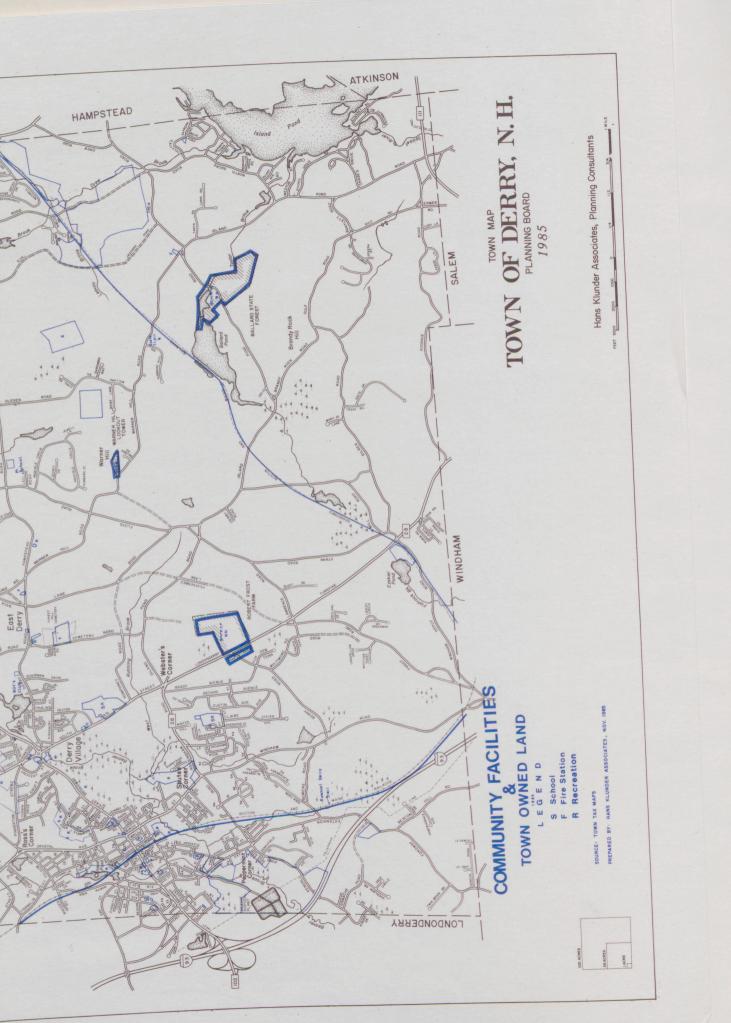
As in the past, recreation <u>programs</u> should be geared to meet the needs of the community to take advantage of any new facility.

It is recognized that, in addition to the Parks and Recreation facilities proposed above, education programs for arts and crafts for the young and for the elderly be provided. The former is particularly important in order to direct leisure time activities towards constructive and fruitful endeavors rather than to let spare time be the 'devil's playground'.

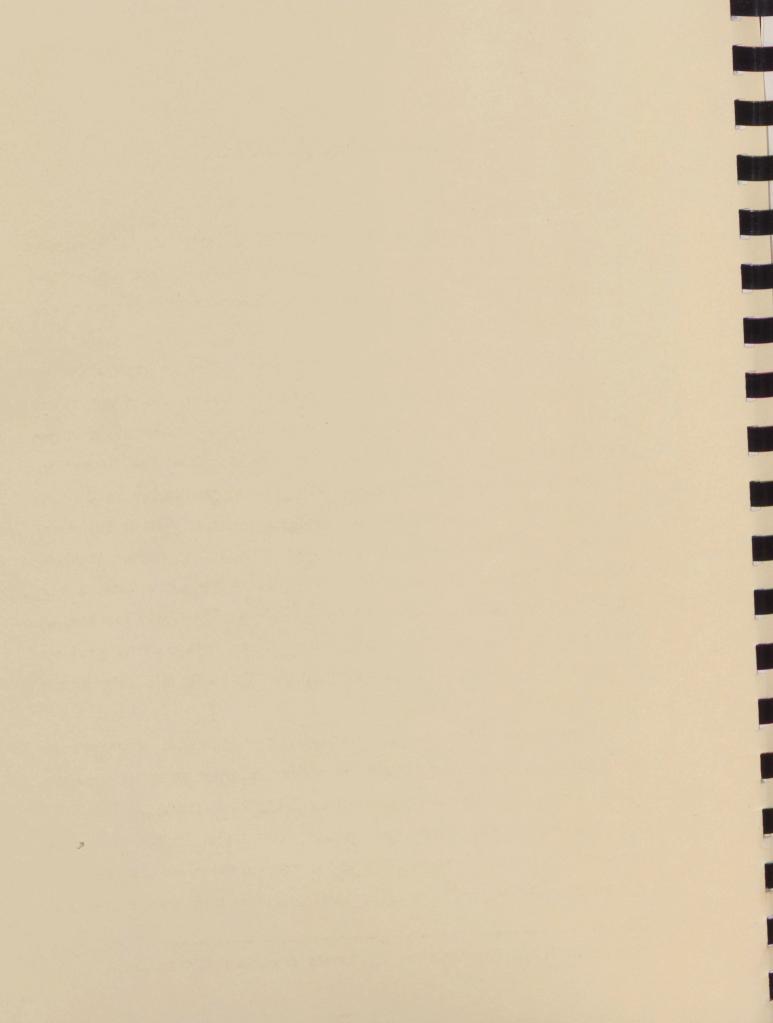
As indicated through the Citizens Survey, an active recreation program, coupled with adequate facilities, should be an important element in Derry's future.











D. HISTORIC PRESERVATION*

Cultural Resources in Derry

The Cultural Resources Survey identified approximately 875 structures built in Derry prior to World War II. These individual structures combine with the landscape elements to make up the historic man made and natural environment of Derry.

Derry's development has historically been linked to regional transportation patterns. The first area of settlement was in the village center today, known as EAST DERRY, which was located on the east/west stage-coach road to Portsmouth, which was then the capital of New Hampshire. In 1806 a north/south turnpike was built to the new capital in Concord (Route 28) and a second village center grew up 1½ miles west at the intersection of these two routes. Originally distinguished as "Lower Village", this center is now known as DERRY VILLAGE. Forty years later, a new mode of transportation, the railroad came to town. The tracks ran parallel to the turnpike, but about 1½ miles west and a new village center grew up around the railroad depot, i.e., Derry Depot. This village is today known as WEST DERRY.

These three village centers have distinctly individual characters as defined by the styles of the buildings popular at their period of development. Each center has survived in a remarkably intact condition.

The Scotch-Irish people who came to settle Derry in the eighteenth century were mostly farmers. Therefore, major industry of the town was agriculture. Throughout the town, large tracts of land were cleared for

^{*}Report by Lynne Emerson Monroe, Historic Preservaton Consultant

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these farms. During the nineteenth century subsistence farming gave way to specialty farming, primarily dairy and orchards, and in the twentieth century the poultry industry enjoyed a brief popularity. Both the buildings and the landscapes associated with these farms still survive to maintain the character of this segment of Derry's development.

In the last quarter of the nineteenth century, many of Derry's farms were abandoned so that people might go to work in the factories. Some of these farms were bought as summer houses and some remodeling took place during that time as an indication of this.

This was also the era of the streetcar, and the electric railroad brought summer tourists to Derry's lakes and ponds. Cabin colonies grew up on Island Pond, Chase's Grove, Germantown and Beaver Lake. Beaver Lake Lodge survived as an architectural resource from this time period, as did many of the cabin colonies. Other resources, such as the public pavilion, have been lost.

Like many towns in the state, Derry developed an industrial base during the nineteenth century; in this case the shoe industry, which grew in West Derry. Only two factories survive, as testament of this important industry.

Framework for Maintaining Derry's 'Small-Town Character':

The first important step for maintaining the character of Derry has been taken by identifying it in the Cultural Resources Survey. The next step will be to publicize the results of the survey and create an enthusiastic public. Generally, the results of a survey are enthusiastically received by the community. Most people love history and old houses. Once this appetite has been created, encouraging this public to take steps to

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Resource Protection Measures

East Derry: This center has already been listed on the National Register of Historic Places. National Register listings give recognition and promote pride, but provide no specific protection for identified properties. The Historic District Commission should define boundaries as identified in the Cultural Resource Survey, and recommend to the Town Council that East Derry be considered as a local historic district. The boundaries of this district should be larger than the boundaries of the National Registered District already identified. Besides being governed by the ordinance that the Historic District Commission will create, a public education program for property owners should be undertaken. Good maintenance is a building's best protection. East Derry has an outstanding collection of Federal period buildings. It is architecturally significant and its best protection will be through good continued maintenance.

Derry Village: Derry Village is also predominantly Federal in style, and additionally it has late nineteenth, early twentieth century residential neighborhoods. Derry Village also boasts an intact brick factory and Pinkerton Academy among its architectural resources. This area is somewhat less intact, due to the rotary which bisected the area in the 1940's. Derry Village should be considered as a local historic district. Its boundaries

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have been identified on the historic architectural areas map of the Cultural Resources Survey. In addition, property owners should be encouraged to undertake good rehabilitation programs.

West Derry: This area contains the largest concentration of older buildings in town. It grew up around the railroad and the shoe factories, and the growth and expansion of these industries can be read in the distinctive, intact residential neighborhoods, civic and industrial structures and a fine commercial district on Broadway, i.e. downtown. Preserving the character of this large area will involve multiple techniques. The first idea would be to create another historic district, but with fewer controls than those suggested for East Derry and Derry Village. The review of the Historic District Commission would be given only on demolition or new construction.

Residential Neighborhoods: New zoning should reflect the historic character of these neighborhoods. When discussing neighborhoods, it is important to work first with a public education program for residents and property owners. Neighborhood organizations can then be created for the understanding, enjoyment and promotion of these fine neighborhoods.

The National Trust for Historic Preservation publishes an excellent newsletter called "Conserve Neighborhoods". In addition to the newsletter, they run conferences and programs for neighborhood leaders. Derry should consider participation in this program. Leadership for this effort might come from the Historic District Commission or from the Derry Planning Office. Various avenues might be explored for identifying neighborhood

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leadership. If this becomes a priority, the possibilities are limitless. These special areas are one of Derry's primary resources for maintaining a sense of community alive.

Downtown Commercial Center: A variety of late nineteenth, early twentieth century commercial buildings have survived. These are in various states of preservation, having had unfortunate rehabilitation efforts during the last decade. In many cases, the buildings survive in an intact condition on the second stories, while on the first story, storefronts have been replaced with newer unsympathetic, incompatible designs. Regional shopping centers and patterns have changed, as commercial strip development has developed on the borders of downtown and outlying areas. Downtown has some vacancies now.

Downtown has a diversity of uses, as well as a visual diversity. Unfortunately, many open spaces have been created, where buildings have been lost to fire and demolition. The filling-in of these spaces should be carefully supervised by the Historic District Commission so that the scale and texture of the streetscape can be reaffirmed.

West Derry is most often defined by its commercial area on Broadway, i.e. its downtown. The downtown area is an important element in identifying the character of Derry--where people shop, go to the post office, go to the Town Hall, and go to the library has a lot to do with their sense of community. If streetscape improvements, such as light fixtures, paving or pedestrian amenities are being considered, the Historic District Commission should be consulted as to their design. A fatal mistake of many downtowns is including Colonial or fake elements from other periods. Derry's downtown is emphatically turn-of-the-century and this unique character has been

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Many techniques exist for helping to revitalize a downtown. Regionally, many communities have conducted successful revitalization programs of their downtowns. Advice is available from the New Hampshire State Historic Preservation Office, Office of State Planning and Regional Planning Commissions. The National Trust for Historic Preservation has a Mainstreet Program, which offers matching funds for hiring Downtown Managers. Derry might look into this significant program. A downtown Merchant's Association might be formed to promote downtown shopping. A boost in the downtown economy would clearly boost the architectural resources as well.

Two studies were produced in 1984. They were compiled by a team of professionals from Applied Economic Research and Rist-Frost Associates. These studies are titled "Derry Railroad Corridor Feasibility Study, Part One: Economic Analysis" and "Part Two: Feasibility Study". These studies were undertaken as preliminary steps toward revitalizing the downtown. These studies should be utilized and implemented by a Downtown Revitalization Committee. This Committee should be formed of representatives of both the public and private sectors, i.e. a member of the City Council, the Historic District Commission, the Planning Board, the Chamber of Commerce, the Merchant's Association, a local merchant, a real estate owner, and possibly a developer to name some possibilities. This group

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Summer Resort Areas: The areas identified on Derry's two lakes might be considered as secondary historic districts. In these areas, the Historic District Commission would have jurisdiction only over demolition and new construction. The guidelines of the commission could address the specific architecture of the cabins at the turn-of-the-century. Property owners could be encouraged, therefore, to maintain their properties in a characteristic and sympathetic manner. These areas are part of the unique character of Derry.

Historic Agricultural Areas: During the eighteenth and nineteenth centuries, much of the arable land in Derry was cleared for farming. This process has reversed in the twentieth century, however, and today many of the farms have been abandoned and much of the land is returning to forest cover. To accommodate Derry's considerable housing boom, many of these historic farms have already been bought and subdivided.

The Cultural Resources Survey identified nearly a dozen areas where the historic agricultural character of Derry was still remarkably intact. In these areas the landscape combines with the historic farms to present a wonderful picture of the agricultural heritage of the town. Driving or walking through these areas, it is possible to recall the days before the housing boom.

A current survey of the open land now remaining in Derry shows 50 parcels in the ownership of 30 to 35 people. Some of this land is used by two dairy farms, which still operate; half a dozen market garden farms;

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some orchards and several horse farms (a recent trend). The balance of open land which is not owned by the farmers, is rented by them and used for crops, such as hay, alfalfa and corn. The availability of this land is especially important for dairy farmers who are unable to afford to own the amount of acreage they need. Indeed, the important dairy industry may be on the verge of extinction in Derry.

Open agricultural land is the single resource which contributes to the character of Derry that is in the greatest present danger. Therefore, the Historic Preservation Committee spent a great deal of time exploring the individual techniques available for protecting land. These techniques included municipal land use controls such as historic districting; agricultural zoning; land evaluation and its site assessment (LESA); the right-to-farm law; site plan review combined with cluster development and planned unit development; performance standards; and transferrable development rights. It was the consensus of the committee that a combination of these techniques would be helpful in achieving their goal. However, the disadvantage of most of these techniques was that they would require considerable professional expertise. This would mean additional volunteer efforts and/or staff in the town Planning Department to initiate and manage these programs. Nevertheless, the Committee felt that an investment in a part-time or full-time staff person to handle these programs, would be well worthwhile in the benefit gained by undertaking these protection measures.

The Committee also investigated private incentives and programs that could augment the community's efforts. A private/public partnership could be formed, which could increase the potential for protecting open land. These techniques included the formation of local development corporations,

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and revolving funds to be managed by a local development corporation. The local development corporation can include land trusts; the problem again was the need for staff time. Other private possibilities included estate planning; easements; covenants and deed restrictions; and outright acquisition by both public and private sectors.

The overall concept of partial development was looked on favorably as the strongest possibility. The advantage of this concept is that it involves the establishment of an informal partnership among the landowner, local conservation groups, the developer and the bank responsible for financing the package. This approach is beneficial because it allows fair compensation to the large property owner and provided for new housing, while protecting land resources critical to the community.

The recommendation of the Historic Preservation Committee, therefore, is that an ongoing group, a Landscape Preservation Committee, be formed to begin the actual implementation of land protection. This group should have representatives from both public and private sectors.

Other Possibilities

With the development of these implementation techniques, the remaining sections of Community Goal #2 and #10 have been met. Other elements of the Master Plan should be reviewed for compatibility with historic preservation goals. These include:

<u>Transportation</u> Many of the roads and highways in Derry represent historic routes of travel. These roads should be given special consideration. Some areas have been identified on the map as scenic

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agricultural and historic areas. Every effort should be made to divert traffic away from these historic routes, rather than widening them to accommodate increased traffic through the area. Highway and road improvement can potentially have serious impact on the integrity of Cultural Resources. Forethought and flexibility should be the watch words when dealing with such improvements. The Department of Public Works and Highways should be informed that Derry now has a complete Cultural Resources Inventory. This will help them in the pre-designed stage so that Derry can be assured that these resources will be given full consideration during corridor and design hearings.

Derry has serious traffic problems which must be addressed.

One possibility that does not seem to have been explored is the area of mass transit. Regional studies have been and are being done, and Derry might consider stronger participation, even leadership, in these efforts. A mass transit system could be beneficial to all parts of town.

Recreation Derry's ponds and parks have been a source of recreation throughout its history. These historic uses should be maintained and encouraged. Town facilities in West Derry include tennis courts and a lake front recreational center. The development of more such resources is encouraged. The historic railroad corridor has been abandoned and should be maintained in an open condition. This corridor provides a scenic/historic recreation possibility.

The area known as the English Range, progressing down through Chester Road, Beaver Lake to East Derry and south of East Derry center is amazingly intact. This scenic section could be enhanced by a series of bicycle paths and/or trails. A brochure highlighting the

agricultural and historic areas. Every effort should be made to divert traffic away from these historic routes, rather than widening them to accommodate moreased traffic through the area. Highway and road improvement can potentially have serious impact on the integrity of Cultural Accountes. Forethought and flexibility should be the watch words when dealing with such improvements. The Department of Public Rorks and Highways should be informed that Derry now has a complete Cultural Accountes inventory. This will help them in the pre-designed stage so that Derry can be assured that these resources will be given full consideration their operation and during corridor and design hearings.

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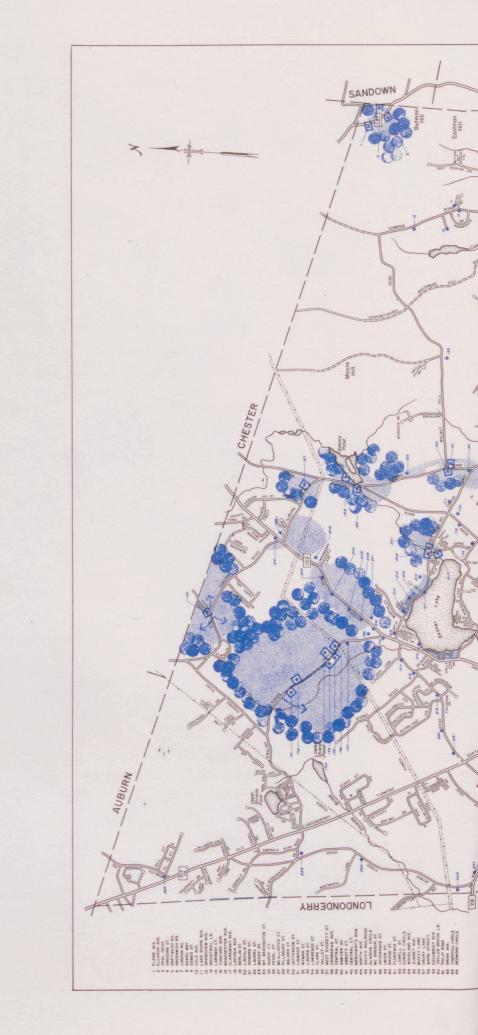
historic and scenic uses could be prepared to highlight the community's most outstanding assets.

Community Facilities The town should conduct a space-needs inventory and compare it with the space existing in some of its historic structures. For instance, the town owns the significant Adams Memorial Building, which has a particularly high potential for use as a theatre or arts center. Its historic materials and location strongly suggest this use. A study report of the feasibility of reusing this building, produced in 1982, will be very helpful with this project. The Capital Improvements Program should reflect the needs of these buildings, for maintenance and rehabilitation.

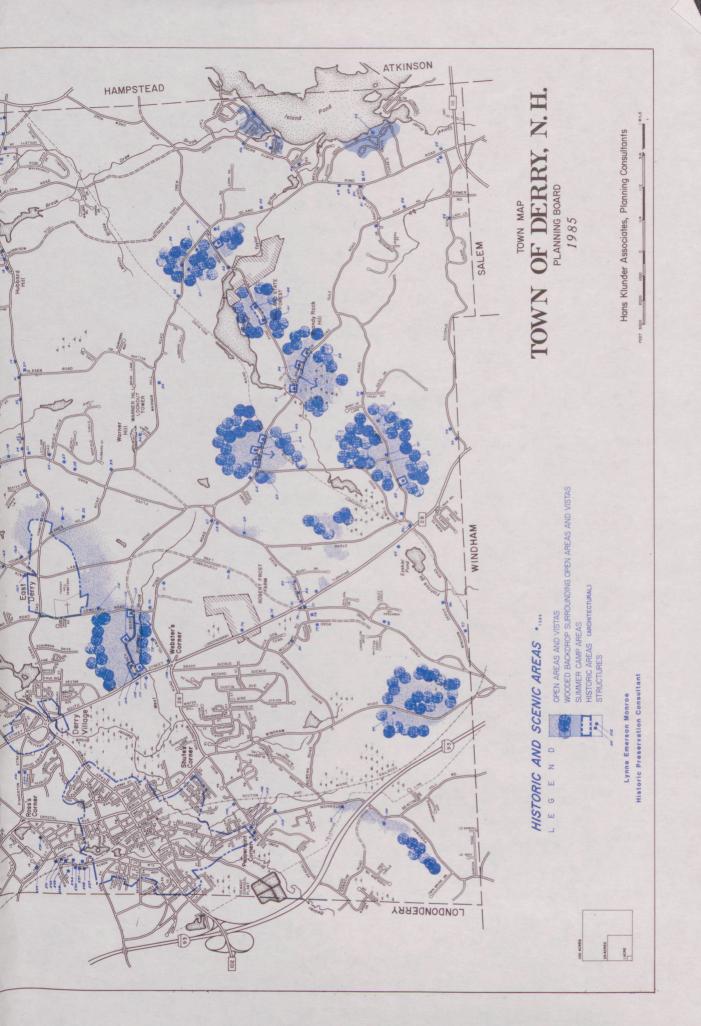
It is important that the implementation efforts of other phases of the Master Plan, such as transportation, economic development, and downtown revitalization, be coordinated with the cultural preservation efforts outlined in this segment of Derry's Master Plan. historic and scenic uses, could be prepared to highlight the community assets.

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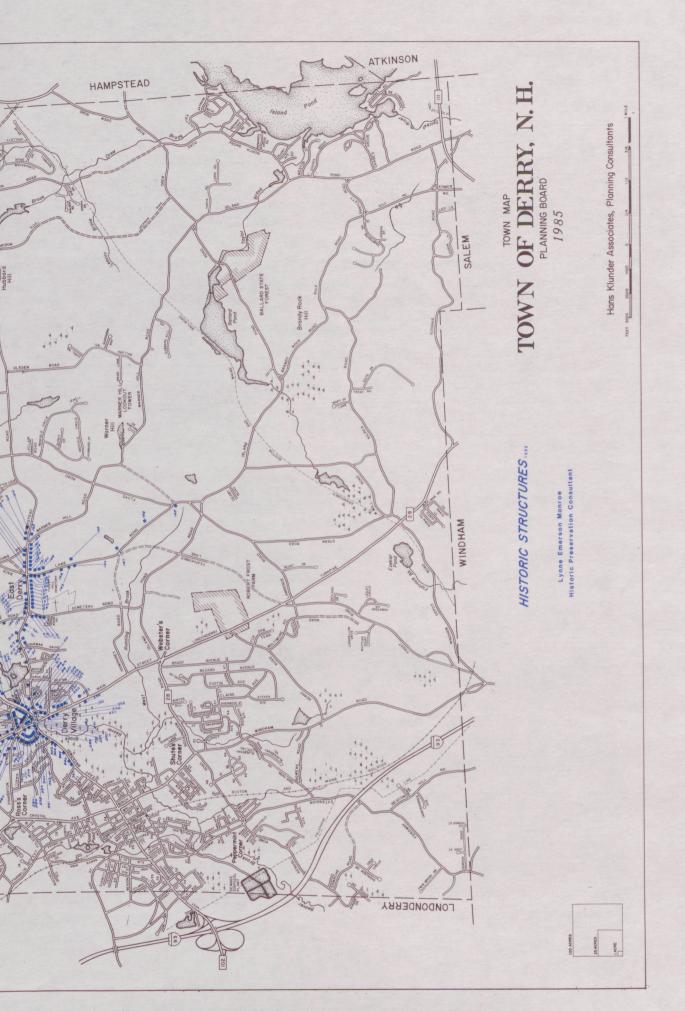
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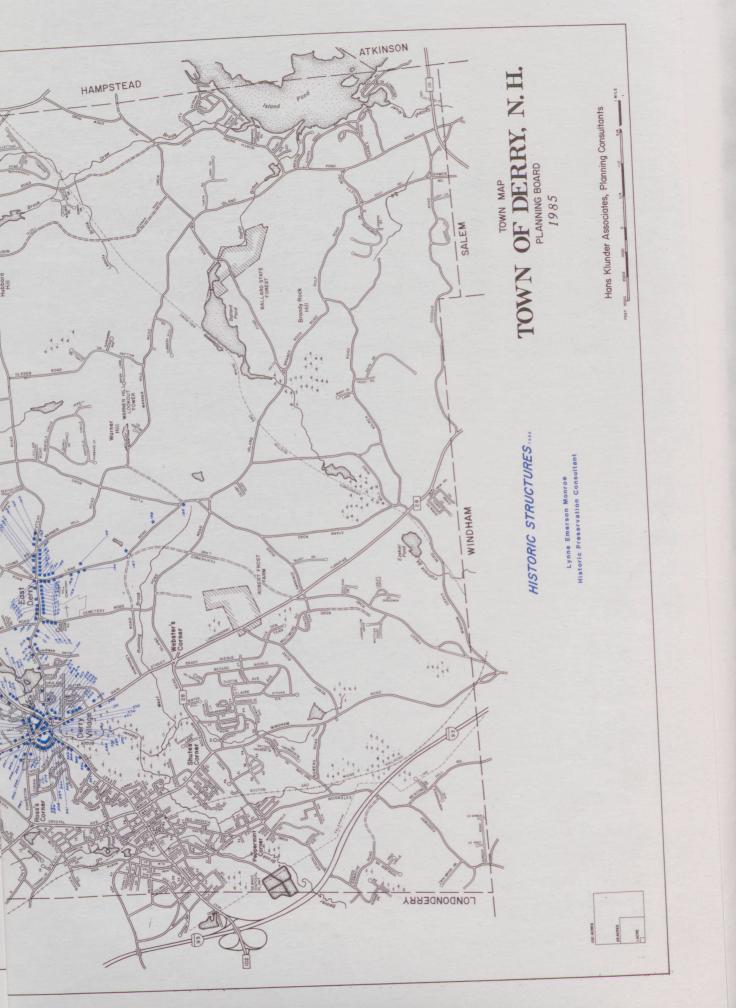












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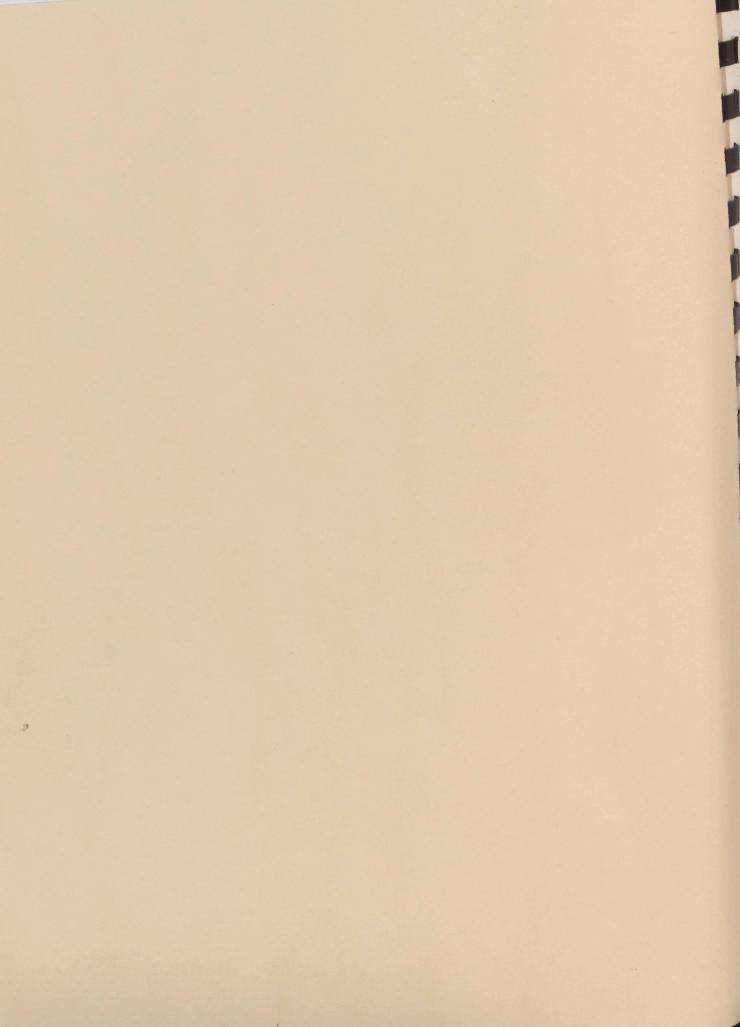
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APPENDIX

Questionnaire Summary	A-1
Public Opinion Survey (sample)	A-6
Sectional Analysis of Survey Returns (percentage/numerical)	A-8
A Brief Guide to Developing Derry's Planning Information System	A-18
1986 Estimated Population	A-21

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APPENDIX

Questioneal e Summary

Public Opinion Survey .

Sectional Analysis of Survey Returns (Itercentage instruction))

Certify's Planning Information System

1985 Estimated Population

QUESTIONNAIRE SUMMARY (based on 20% return)

Introduction

Questionnaires distributed in early August and returned to the Planning Board have given significant insight into actual concerns of the Town of Derry. Approximately 20% (or 1810) of the 9050 questionnaires sent out have been returned and tabulated. It should be noted that early percentages calculated (on approximately 5% of returns) established a definite pattern of response by the townspeople that has not varied appreciably. Subsequent returns have merely reinforced the initial responses. Specific points of note are as follows:

1. Under housing construction, 61% felt single family housing should be encouraged with mild restrictions, while 34% felt apartments and mobile homes should not be allowed.

Slower residential growth was favored (67%).

- 2. Faster industrial growth was favored, with the stipulation (93%) that it be <u>light</u> industry. 60% said they favored neighborhood stores, and felt the Town needed: 1) Entertainment Facilities, 2) Retail Stores, 3) Parking Facilities, 4) Service Businesses, and 5) Professional Facilities, in that order.
- 3. Concern for the natural environment prompted 95% of the people to indicate their feeling that Derry should have codes and enforcement programs to protect the environment. They were willing to protect and pay for scenic areas (76%), sensitive wetlands (75%) and farmlands (65%).
- 4. The majority of people rated police protection, fire protection and schools good, while road maintenance, road construction and zoning enforcement were thought to be rather poor. On the public spending question, people thought more money should be spent on road maintenance (97%) and libraries (89%).
- 5. Nearly half of the people had privately owned sewer and water facilities.
- 6. The people favored protecting historic buildings (81%) and cultural resources (75%), and wanted to provide for the means to retain these town assets.
- 7. Under recreation, the three main votes were for a community center for all ages (797), bicycle trails (763) and an indoor pool (644). Also, access to Big Island Pond for Derry residents only was indicated (78%).
- 8. Zoning changes for neighborhood child care facilities and creating a town center (Town Hall, Common, etc.) each got about a 50-50 response.
- 9. 75% said the U.S. Post Office was adequate.

A-1

QUESTI SUMIRE SUMMERY

Introduction

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 - . some ser ectito saot . 2.0 san biss and

10. On the taxation questions, people did not favor a state income tax (76%), or a state sales tax (70%) and wanted to keep taxes and services at their current levels (68%).

One of the most positive points gleaned from the questionnaire is that the people live in Derry because they like it (78%) - they like the town and its people and are concerned because the 'small town atmosphere' that first attracted and has kept them in Derry appears to be threatened. It is this consultant's opinion that careful long-range planning through the Comprehensive Planning effort can preserve the physical and socio-economic climate.

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TOWN OF DERRY PUBLIC OPINION SURVEY

2.	Place of Work:	Derry	- 363	Outside	-	1222	
	If you could find wo would you work in D	rk locally, erry?		Yes	1112	No	293
3.	If not employed, are	you:					
	Retired	106 Part-	-time 32	Unemployed	1 20		
4.	Is Derry a nice town	?		Yes	1151	No	333
5.	Property in Derry:	Own	1,356 Ren	t 185			
6.	Should there be a se Should it be an expa	cond high s	school in to	wn? Yes	358		997
	Should it be an expa	high school	1?		612		470
	product to be a public	night school	7.	res	520	No	556
7	How should the construction?	town trea	t the follow	owing kinds	of	new	housing
		Not	Allow	with		Fnoor	
		Allow	Corrore D.				urage with
		ALLOW	pevere Ke	estrictions	Мп	Id Re	etrictions
			severe Re	estrictions	Mi	ld Re	strictions
	Public Low Income	513	642	estrictions	Mı	1871	strictions
	Public Elderly	513	642 349	estrictions	Mi	313 1023	32
	Public Elderly Sub. Moderate Inc.	513 66 453	642 349 842	estrictions	Mi	313	91 32 110
	Public Elderly Sub. Moderate Inc. Apartments	513 66 453 670	642 349 842 616	estrictions	Mi	313 1023	91 32 110
	Public Elderly Sub. Moderate Inc. Apartments Town Houses	513 66 453 670 512	642 349 842 616 624	estrictions	Mi	313 1023 383 205 327	32 110 135 73 321
	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family	513 66 453 670 512 44	642 349 842 616 624 322	estrictions	Mi	313 1023 383 205 327 1102	32 110 158 73 121 126
	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes	513 66 453 670 512 44 701	642 349 842 616 624 322 533	estrictions	Mı	313 1023 383 205 327 1102 255	32 110 158 73 121 126
	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family	513 66 453 670 512 44	642 349 842 616 624 322	estrictions	Mi	313 1023 383 205 327 1102	32 110 158 73 121 126
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533	estrictions	М	313 1023 383 205 327 1102 255	32 110 158 73 121 126
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533		797	313 1023 383 205 327 1102 255 418	3.2 110 138 7.3 121 126 107 165
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts?	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533		797	313 1023 383 205 327 1102 255 418	316
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields?	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533	Yes	797 392	313 1023 383 205 327 1102 255 418 No	316 443
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields? Skating Rink?	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533	Yes	797 392 565	313 1023 383 205 327 1102 255 418 No No	316 443 301
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields? Skating Rink? Indoor Pool?	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533	Yes Yes Yes	797 392 565 536	313 1023 383 205 327 1102 255 418 No No No	316 443 301 344
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields? Skating Rink? Indoor Pool? Boat Launch?	513 66 453 670 512 44 701 392 needs:	642 349 842 616 624 322 533	Yes Yes Yes Yes	797 392 565 536 644	313 1023 383 205 327 1102 255 418 No No No	316 443 301 344 343
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields? Skating Rink? Indoor Pool? Boat Launch? Bicycle Trails?	513 66 453 670 512 44 701 392 needs: all ages?	642 349 842 616 624 322 533 664	Yes Yes Yes Yes Yes	797 392 565 536 644 513	313 1023 383 205 327 1102 255 418 No No No	316 443 301 344 343 387
8.	Public Elderly Sub. Moderate Inc. Apartments Town Houses Single Family Mobile Homes Duplex Recreation Derry Community center for Tennis Courts? Ball Fields? Skating Rink? Indoor Pool? Boat Launch?	513 66 453 670 512 44 701 392 needs: all ages?	642 349 842 616 624 322 533 664	Yes Yes Yes Yes Yes	797 392 565 536 644 513	313 1023 383 205 327 1102 255 418 No No No No	316 443 301 344 343 387

TORKIC GENNION SERVEY

Access to Big Island Pond for Derry residents only?

Yes 782 No 227

9. Growth:	Residential growth should be: Industrial growth should be:	Slower 1204 360	Faster 95 645	Same 231 341
	Light industry? Heavy industry?		Yes 1379 466	No 103 861
	Is there a need for: Retail Stores? Service Businesses Professional Facilities? Entertainment Facilities? Parking Facilities?	?	814 688 623 955 727	503 519 607 337 525

10	. Pub	lic Servi	ces				
_		ting		Privately		Spend	
Go	od F	air Po	or	Owned	Mo		ie Less
265 348 967 1107 210 205 794 431 176 247 460	166 200 325 212 532 475 321 466 362 397 500	117 93 72 24 700 487 54 343 537 191 246	Sewer Service Water Service Police Protection Fire Protection Road Maintenance Road Construction Schools Libraries Zoning Enforcement Elderly Programs Parks and Recreation		196 169 343 328 913 558 339 584 406 387 455	327 392 836 871 408 540 680 547 497 514 602	108 118 139 91 32 110 155 73 121 136 107
152	247	461	Enforcement of All Vehicle and Off Hi Recreational Vehicl	ghway	362	369	168

11. Conservation and Cultural

Should Derry protect and pay for:

Scenic areas? Yes 1134 No 349;

Sensitive Wetlands? Yes 970 No 315;

Farmlands? Yes 868 No 504;

Historic Sites & Buildings? Yes 1156 No 278; Cultural Resources? Yes 974 No 320.

Should Derry have codes and enforcement programs to protect the environment? Yes 1443 No 74

forces to Hig Taland Fond for for Derry residents only?

Yes 782 No 227

Should Deary protect and pay for:

Sendative Wetlands? Yes 970 No 315;

Hintoric Sines & Buildinger Yes 1150 w. crs.

Cultural Resources?

environment? have codes and enforcement programs to protect the

12.	Do you favor: Neighborhood Stores? Zoning changes for child care facilities?	Yes Yes	1193 678	No No	331 619
	Should Derry create a town center?	Yes	703	No	739
	Is the US Postal Service adequate?	Yes	1159	No	391
15.	Miscellaneous				
	Would you support a state wide income tax Would you support a state wide sales tax? Which of the following do you favor: 233 - Raising taxes	Yes Yes		No No	1035 991
	216 - Cutting taxes 941 - Keeping taxes and services at current le	vels			

Total Court of the Court of the

PUBLIC OPINION SURVEY

By the Planning Board Master Plan and Citizens Committee

The Town of Derry is currently working on Phase I of updating its master plan for Derry's future. However, we need to know what you believe to be most important for Derry's give us some information and make your thoughts known by answering each item of the questionnaire and by adding your comments whenever you see fit. In order to be counted, Thank you for taking the time to help.

Planning Board Master Plan and Citizens Committee, Geraldine Bangs, Chairman

After completing questionnaire, please fold and mail

763	After completing of	uestionnaire, please fo	.1.1	
21an		ONE	old and mail	
Auburn		ONE RESPONSE PER HOUS 1. Population Date	EHOLD ONE	23
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d /	Chester	Children's Ages	your household?	
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Area I	ampstead Post			
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Broadway	Hampstead	2. Place of Ward	- Dake	
4	g a	2. Place of Work		
A A	rea 3	Derry;	Room	
Area 4		Derry; Manchester A Nashua Area;	Teat;	Lowell:
11111111	Island Pond	Nashua Area; Portsmouth A	Rou	te 128. MA.
311	U	Portsmouth	Law	rence:
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Windham		If you could find in Derry? Ye:		
11		in Derry?	work locally, w	rould was
		Ye:	S No Tf	To sol work
		in Derry? Yes		no, why not?
 If not employed, 	Sugararagus as			
- proyeu,	are you: Retire	d Dama S.		
		d Part Time Une	mployed on	
			othe:	Explain
4. Is never				
4. Is Derry a nice	own?			
		Yes, Why;		
			No, Why not	
5. Property 4- p				
5. Property in Derry	^-			
198	Own	Rent		
BEDIDOES Inter				
6. Should there he a	second high school :			
Should it he an	second high school	in town?		
Should it be	second high school : expansion of the presublic high school?		Yes W-	
The a pi	blic high school?	racilities?	Vac NO	
			700	
7. How should		THE POST TORKS IN THE PARTY.	No No	
(Ch. included the tow	n treat the follow	g kinds of new housing Allow only with		
(Check one for eac	h) Non	g kinds of new house		
0110	NOE	Allow only with E severe restrictions mi	construction?	
THE LOW INCOME	allow	severe restrictions mi	NCOURAGE with	No
Public Elderly	-	mí	ld restrictions	NO
Subsidized Moderate	T		- CLOIIS	opinion
	Income	Datas - Elicara	Deputy or	_
Town Houses	THE RESERVE THE RESERVE TO	PHYSICAL PROPERTY OF THE PARTY		
Single Family	MARKET BEST BEST WEST	TARVER OF	-	
Manufactural	A Terol or bly and	THE PARTY TOTAL TOTAL	_	
Manufactured (Mobil	e homes)	THE RESTRICT OF DESIGN AT AN	-	
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	sons to 6		77	_
8 7		49 97032 h paper 14		-
8. Recreation Derry ne Tenn (check no more	ede. C-		RALLY 2.9	_
Ton	community cer	iter for all		
(check no more Skat	is Courts Yes	No. B ages	Yes	
at more skat	ing Rink	NO; Ball Field-		_ No;
Boat	Launch	Indoor Pool	Yes	No;
All	Terrain Vehicle m	DICUCIO M	Yes	No.
				No:
Vehic	cle Trails Yes	Access to Big Derry resid	Island Pond for	,
	re Trails Yes	No.	-mrs outa	
		Y	es No	

THANK YOU FOR COMPLETING OUR QUESTIONNAIRE PLEASE MAIL OR DELIVER TO:

STAMP

PLANNING OFFICE 40 FORDWAY DERRY, NH 03038

	Slower Faster Same
	Pesidential growth should be:
9.	Industrial growth should be:
	Light Industry Yes No
	Heavy Industry Yes No
	Where should industrial development be located?
	Is there need for: Retail Stores Yes No; Service Businesses Yes No; Professional Services Yes No; Entertainment Facilities Yes No; Parking Facilities Yes No;
	Service Businesses Yes No; Professional Services Yes No;
	Forgertainment Facilities Yes No; Parking Facilities Yes No;
10.	Public Services Rate the following municipal services and indicate if you think the
	rown should spend more, less, or the same amount of money on their provision.
	No Privately Spend Spend No
	Good Fair Poor Opinion Owned More Same Less Opinion
	Sewer Service
	Water Service
	Police Protection
	Fire Protection
	Road Maintenance
	Road Construction
	Schools
	Libraries
	Zoning Enforcement
	Elderly Programs
	Parks and Recreation
	Enforcement of All Terrain
	Vehicle and Off Highway
	Recreational Vehicle Laws
11.	Conservation and Cultural
	Should Derry protect and pay for: Scenic areas Yes No;
	Should Derry protect and pay 101. Secure and Sensitive Wetlands Yes No; Farmlands Yes No; Historic Sites and Buildings Yes No; Cultural Resources Yes No.
	Should Derry have codes and enforcement programs
	Should Derry have codes and enforcement programs
	to protect the environment? Yes No
	Do you favor: Neighborhood StoresYesNo;
12.	Do you favor: Neighborhood Stores res No; Zoning change for neighborhood child care facilities Yes No
	Zoning change for heighborhood child care to the last the
	Should Derry create a town center? (Town Hall, Common Etc.) Yes No
13.	Should Derry create a town degree 2
14.	Is the US Postal Service adequate? Yes No
15.	Miscellaneous In the last few years, state aid to communities has decreased. This forces towns to
	rely more heavily on property taxes to pay town expenses; yet many residents feel
	their property taxes are already too high. Would you support a state wide income tax
	if it were used to increase state aid to local government and reduce local property
	taxes? (check one) Yes No Don't Know No Answer
	taxes? (check one) Yes No Don't Know No Answer
	Would you support a state wide sales tax to increase state aid to local government and
	Would you support a state will sate to the same sate will sate to the sate sate will sate sate will sate sate will sate sate will sate sate sate will sate sate sate sate sate sate sate sate
	decrease local property taxes? (check one) Yes No Don't Know No Answer
	Yes No No Answer
	s it does do you favor?
	Which of the following do you favor?:
	Raising taxes to improve services
	Cutting taxes and reducing services
	Keeping taxes and services at current levels
	Don't know/ no opinion

Sectional Anal	ysis	of	Returns
----------------	------	----	---------

						*Not
	(AREA)	1	2	3	4	Identified
		(%)	(%)	(%)	(%)	(%)
1.	Where do					
	you live?	7	23	26	21	23
2.	Place of Works Down		0.7	11	9 23	
2.	Place of Work: Derry	9	27	26	24	14
	Manchester	1	5	5	4	
	Nashua	2	5	4	3	
	Portsmouth	.002	.004	.007	.004	
	Boston	1	3	4	3	
	Lowell	.008	2	2	2	
	Rte. 128	1	4	5	3	27
	Lawrence	.006	2	3	3	
	Haverhill	.0008	.008	1	.003	
	Salem	.003	1	2	.003	
	Concord	.002	.0008	.0008	.003	
	Bow	0	0	0	0	
	Other	.008	2	.0008	1	
	Would you work in Derry?					
	Yes	6	21	25	18	20
	No	5	25	22	17	30 31
				22	1/	31
3.	If not employed, are you:					
	Retired?	8	19	26	20	27
	Part-time?	13	19	22	19	27
	Unemployed?	15	15	20	20	30
						494
4.	Is Derry a nice town?					
	Yes	7	24	28	18	23
	No	9	24	25	20	22
				23	20	22
5.	Property in Derry - Own	6	26	28	18	22
	Rent	18	12	12	25	22
				12	23	33
6.	Second High School? Yes	8	22	26	20	24
	No	8	24	26	22	20
	Expand present facilities? Yes	0	21	26	10	
	No	8	21	26	18	27
	NO	0	22	21	22	29
	Public High School? Yes	7	24	27	21	21
	No	8	24	25	21	22

^{*}Exact location (by area) was not designated on survey.

7.	llousing	Construction
	mongring	constituction;

AREA	1	2	3	4	*No		1	Severe 2	3	4	*Not		Mil	d Rest	3	ons 4	*No
Public	(%)	(%)	(%)	(%)	(%))	(%)	(%)	(%)	(%)	(%)		(2)	(%)	(%)	/91	(%)
Low Inc.	7	24	25	22	22		6	25	28		NI NAME OF TAXABLE PARTY.		1011		2 10	(%)	(2)
Public					7		·	23	20	22	19		13	20	20	22	2%
Elderly	11	23	17	26	24		8	- 25	31	20	16		8	24	26	23	19
Sub. Mod. Income	8	25	25	21	21		5	16	17	15	47		8	24			
Apart-								ak.		13	47		8	24	22	23	23
ments	7	26	26	20	20		5	24	26	22	23		15	19	20	22	24
Town Houses	9	24	25	23	19		5	25	28	21	21		40.	-			
Single									20	21	21		9	23	25	22	21
Family	5	16	27	23	30		5	25	30	21	19		8	24	25	22	21
dobile Homes	5	29	28	20	17												
Ouplex	6	24					7	22	27	23	21		13	20	19	22	26
		24	29	21	19		4	23	30	20	23		12	22	19	24	23
. Recreat	ion:				VEC												
REA			1	2	YES 3	4	*Not		H .	1	2	NO 3	,	1			
2 1 2 2 2 2			(%)	(%)	(%)	West .						3	4	*Not			
						(%)	(%)	_		(%)	(%)	(%)	(%)	(%)			
Communit			8	23	22	23	24			8	27	27	17	21			
Tennis C	ourts		8	25	29	17	23			8	24	22	23	23			
Skating	Rink		8	20	27	22	23			7	28	23	20	22			
Boat Lau	nch		5	12	16	12	55			7	28	25	19	21			
ATV Trai	ls		7	18	25	26	24			8	27	26	19	20			
Ball Fie	lds		7	24	25	20	24				24						
Bike Tra:	ls		7	24	25	9	35					25	21	23			
Access to	Big									0	26	20	16	32			
Island)	bno		8	21	25	23	23			6	26	33	17	18			

9. Growth:

	FAS	TER_			12	SLOW	ER			22. 3	SAME	SAME			
AREA	1	2	3	4	*Not	1	2	3	4	*Not	1	2	3	4	*Not
OH CHE	(%) (%)	(%)	(%)	(%)	(%)	(%)	(%)	(%) (%)	(2)	(%)	(%)	(%)	(%)
Residential	4	25	6	58	5	8	24	28	18	22	7	23	24	40	6
Industry	8	24	25	22	21	6	23	22	26	24	9	26	25	19	21

ADPA	entects t	omis.		YES				,	10	
AREA	1	2	3	4	*Not	1	2	3	4	*Not
	(%)	(%)	(%)	(%)	(2)	(%)	(%)	(%)	(%)	(%)
Light Industry	7	18	26	21	28	4	19	24	22	31
Heavy Industry	8	22	23	27	20	7	25	26	20	22
Retail Stores	8	23	31	22	16	6	36	22	25	11
Service Business	7	19	24	20	30	8	32	25	23	12
Professional	7	22	30	22	20	9	29	24	25	13
Entertainment	9	25	27	24	15	6	28	26	22	18
Parking	8	25	27	21	19	7	26	26	25	16

*Exact location (by area) was not designated on survey.

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10. Public Services:

		GC	DOD					F	AIR					Do	
AREA	1	2	3	4	*Not	1	2	3	4	*Not	1	2	3	4	NOT *NOT
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
Sewer	17	17	14	32	20	13	21	20	20			(2)	(2)	(%)	(2)
Water	14	15	13	32	26	11	18			26	3	30	24	18	25
Police	8	24						19	23	29	4	22	25	26	23
			24	20	24	7	24	21	19	29	6	21	33	21	19
Fire	8	24	26	21	21	6	27	25	19	23	4	29	21		
Rd.Main.	8	21	18	28	25	8	24	24	23					17	29
Rd.Const.	9	23	21	25	22					21	7	25	29	17	22
Schools					22	8	25	24	22	21	7	24	27	17	25
	8	25	26	22	19	7	24	26	19	24	11	24	15	24	26
Library	8	24	25	32	11	8	22	27	23	20	7				
Zoning	7	18	25	22	28	7	22					28	23	19	23
Elderly	10	25					23	27	34	9	8	24	25	20	23
THE RESERVE AND ADDRESS.	10	25	25	22	18	9	19	25	20	27	6	22	21	16	35
arks	10	22	22	25	21	7	25	23	20	25	9	31			
TV Laws	9	22	24	28	17	7	25				3	31	29	20	11
					-	1	25	29	19	20	7	23	31	20	19

10. Public Services, cont.

			MORE					SAL	1E				LESS	,	
AREA	1	2	3	4	*Not	1	2	3	4	*Not	1	2	3	4	*Not
	(%)	(%)	(2)	(%)	(%)	(%)	(%)	(7.)	(2	(%)	(%)	(9)	(%)	(#1)	
Sewer	5	29	22	17	27	16	19	17	28	20	11	(%)	(%)	(%)	(%)
Water	7	26	25	20	22	15	21	16	28	20	12	18	14	30	19
Police	6	18	30	21	25	9	27	.24	20	20	6	19	18	16	21
Fire	10	19	26	20	25	8	26	24	21	21	8	24	22	26	41
Rd.Main.	8	23	27	19	23	9	28	22	26	15	6	22	25	22	20
Rd.Const.	9	22	26	20	23	9	27	23	20	21	6	24	23	28	25
Schools	10	26	28	24	12	7	26	25	19	23	10	18	17	27	19
Library	8	25	26	23	18	8	25	26	20	21	10	18	33	25	28
Zoning	9	29	24	18	20	8	22	25	25	20	6	22	12	26	34
Elderly	10	22	24	19	25	8	29	23	22	18	.007		12	13	
arks	8	24	23	22	23	8	26	25	21	21	9	25	23		63.003
TV Laws	8	23	30	20	19	7	23	29	21	20	14	24	17	23	20

	Pri	vately	Owne	ed		
AREA	1	2	3	4	*No	
	(%)	(%)	(%)	(%)	(%	
Sewer	2	29	34	18	17	
Water	2	30	35	16	17	

^{*}Exact location (by area) was not designated on survey.

13 62 45 5 1996 T1 61 20 05 5 2210

*Faurt June 15: areal was not destinated to estrage

Ol-A

11. Conservation and Cultural:

AREA	1	2	YE		17	96		NO		
					*Not	1	2	3	4	*No
	(%) (%)) (%) (%)	(%)	(%)	(%)	(2)	(2	(%)
Scenic Areas	7	24	26	21	22	7	24	24	22	23
Sens. Wetlands	8	29	31	24	8	8	23	23	24	
Farmlands	8	25	24	21	22	6	25	35		22
Historical Sites	7	24	26	22	21	8		27	21	21
Cultural Resources	7	24	27	22	20		26	23	21	22
Environmental Codes	7	24	25	21	23	10	25	23	22	20
12. Do you favor:					23	7	20	23	24	26
Reighborhood Stores	8	23	25	21						
Coning/Child Care	6	24			23	6	27	27	21	19
3. Town Center			24	21	25	9	25	27	20	19
J. Town Center	7	24	28	19	22	7	24	24	23	22
4. Post Office										
adequate?	7	23	27	22	21	9	22	23	19	27
5. Income Tax?	7	23	31	20	19	8	21	23	22	
Sales Tax?	8	25	26	20	21	8	22			26
							22	21	21	28
REA	1	2	3	4	*Not					
	(%)	(%)	(%)	(%)	(%)					
Which do you favor:										
RAISING TAXES?	12	21	18	20	29					
CUTTING TAXES?	6	21	23	23	27					
KEEPING TAXES?	7	24	43	23	3					

^{*}Exact location (by area) was not designated on survey.

Ing Construction:	(AREA)	1	2	3	4	Not Ident	ified	TOTAL
1. Where do you live?		We n		ENG				
you rive:		119	379	424	338	386		1,646
2. Place of Work:	Derry	32	97	96	87	51		363
	Manchester	17	62	64	47			
	Nashua	21	38	50	37			
	Portsmouth	2	5	8	5			
	Boston	12	42	46	35			
	Lowell	10	27	22	23			
	Rte. 128	13	52	60	37	332		1 222
	Lawrence	7	27	39	38	332		1,222
	Haverhill	1	10	12	4			
	Salem	3	15	22	4			
	Concord	2	1	1	3			
	Bow	0	0	0	0			
	Other	10	23	1	15			
Would you work	in Derry?							
	Yes	70	233	273	107	79 78		
	No	16	74	63	197 51	338		1,1112
3. If not employed	13 49 12		, ,	03	51	89		293
3. If not employed,								
	Retired?	9	20	28	21	28		100
	Part-time?	4	6	7	6	9		106
O+h(!	Unemployed?	3	3 3	4	4	6		32
Other (as hou	usewife, etc.)	1	3	0	Ó			20
4. Is Derry a nice t								
	Yes	79	279	317	202	274		1 151
	No	30	79	83	66	75		1,151
. Property in Derry	- 0.0					15		333
operty III berry		83	353	377	246	297	11	1,356
	Rent	33	22	23	46	61		185
. Second High Schoo	1? Yes	27	00	00	95 10			
Sirik as tos to	No	75	80	92	72	87		358
		13	242	255	221	204		997
Expand present fac	cilities? Yes	46	131	150	100			
	No	27	104	159	108	168		612
5 25 61			104	100	103	136		470
Public High Schoo	l? Yes	34	123	120	100			
ds 37 van sa	No	47	131	138 141	108	117		520
			131	141	118	119		556

100-2

Housing Construction:

	NOT	ALLO	W				SEV	ÆRE RI	ESTRI	CTION	!S		MIL	D RES	TRICT	IONS		
	1	2	3	4	Not	Tota	1 1	2	3	4	Not	Total			3	4	Not	Total
olic W Inc	. 38	122	130	111	112	F11	2 27	150	470	217	. 166	120	17	55	55	92	13	231
lic derly								158	178	142	127	642	2 40	62	60	70	81	313
· Mad		15	11	17	16	66	5 27	86	109	69	58	349	78	246	268	238	193	1023
rt-	38	112	115	95	93	453	3 38	136	146	125	397	842	31	93	86	89	84	383
ents vn	50	171	177	137	135	670	33	147	158	135	143	616	31	39	40	45	50	205
ouses Ogle	45	121	130	117	99	512	33	156	172	129	134	624	29	76	81	71	70	327
amily Dile	2	7	12	10	13	44	16	79	96	67	64	322	89	265	274	244	230	1102
omes	38	205	195	143	120	701	38	117	143	121	114	533	32	50	48	57	68	255
	23 ation	94	115	84	76	392	29	153	198	135	149	664	51	93	81	101	92	418
		•				YES							0					
•			1	2	3	4	Not	Total		1	2	3	4	Not	Total			
Tennin	ity C	trs.	61	184	179	185	188	797		24	86	86	54	66	316			
nis	Court	s	31	99	112	65	85	392		34	107	99	102	101	443			
Roating	g Rink		45	108	144	116	123	536		24	97	80	69	74	344			
An.	aunch		27	62	82	62	280	513		27	108	96	75	81	387			
ATV Tra	ails		25	61	84	90	80	340		43	154	149	109	111	566			
Bii Fi	ields		37	136	143	111	138	565		21	72	76	63	69	301			
ke Tr	rails		55	183	189	70	266	763		12	56	44	34	72	218			
slanc	to Bi	g	59	167	197	178	181	782		14	60	75	39	39	227			

Growth:

	FAST	ER_					SLO	WER					SAM	F				
/	1	2	3	4	Not	Total	1	2	3	4	Not	Tota		2	3	4	Not	Tota
esiden Ndustr		24 154	6	55 145	6	95		289	337 79	217	266	1204		54		92	13	231
	ndustry ndustry		1 102 38	2 252 104	3 356 108	YES 4 292 125	Not 377 91	Total 1379 466	53 126	1 4 62	2 20 213	3 25	NO 4 23	Not 31	85 Total 103	66	73	341
Vice	Stores Business		69 55	185 154	252 194	178 161	130	814 799	116	32	179	111	174	185	503			
ofessi	onal nment		41 90	137 243	186 260	139	120	623 955		53	16517596	12814589	11814975	67 85 57	519607337			
9			61	179	193	155	139	727		35	135	139	129	87	525			

Public Services:

		(CCCCD					ı	FAIR					,	~~~			
	1	2	3	4	Not	Total	1	2	3	4	Not	Total	1		POOR 3	4	Not	Total
	44	45	38	84	54	265	21	35	33	33	3 44	166	1	1 10		-	1101	. TOTAL
	48	53	45	111	91	348	22	35				166			28	21	29	117
	80	236	229	194	228	967	22		200		488	200	4	20	23	24	22	93
	91	261	286	237				79	67	62	95	325	4	15	24	15	14	72
n.	16				232	1107	13	58	53	41	47	212	1	7	5	4	7	24
st.		45	38	59	52	210	45	126	126	120	115	532	49	173	203	121		
s s	18	47	43	52	45	205	38	119	116	105	97	475	35				154	700
	60	197	207	173	157	794	24	76	83	60	78			119	133	83	117	487
	36	102	107	136	50	431	35	102	127			321	6	13	8	13	14	54
	13	32	44	39	48					106	96	466	25	96	80	65	77	343
,	24	61	61			176	27	82	96	122	35	362	44	130	136	108	119	537
				55	46	247	37	76	101	80	103	397	11	42	41	30	67	136
'S	45	101	103	114	97	460	37	127	117	101	118	500	21	75	69			191
S	14	34	37	42	25	152	18	61	72	48	48	247				47	28	240
											10	247	30	108	145	91	87	461

Addic Services

SIA1

			MORE					,	SAME									
	1	2	3	4	Not	Total	1 1	2		4	Not	Total	90		ESS			
ver	1215	9 57	7 44	211				113	*		1100	Total	1	2	3	4	Not	t Total
ter				283	298	196	53	62	2 55	92	65	327	12	25	18	32	21	108
lice	1		71.71	33	39	169	58	84	64	109	77	392	14	21	16	41		
re	2:	2 63	3 103	73	82	343	78	228	200	167	163	836	9	26			26	118
Toronto.	33	3 63	86	66	80	328	67	228	212	186	178				25	22	57	139
Main.		211	242	173	212	913	36	113	89			871	7	22	20	24	18	91
Const.	48	122	145	111	132	558	48			108	62	408	2	7	8	7	8	32
thools	34	87	96	83				147	123	109	113	540	7	26	25	31	21	110
brary	46	145			39	339	50	178	167	130	155	680	15	28	26	42	44	155
ning	36		153	136	104	584	46	139	141	112	109	547	7	13	24	18	11	
derly		117	97	74	82	406	38	111	123	122	65	497	7	27	15			73
rks	40	86	93	73	95	387	42	151	117	112	92	514	1	15		32	40	121
	38	110	105	101	101	455	49	155	148	128	122				16	18	86	136
laws	28	83	109	74	68	362	24	84	106	79			10	27	25	25	20	107
						68	BH S		100	19	76	369	23	41	29	37	38	168
	Priva	telv																
In	Owne	ed																

11 185 218 113 118 645

10 182 212 94 106 604

29

Owned 11 185 218 118 118

SUBSECTION.

· Conservation and Cultural:

	1	2	3	YES	-	AHSTE	FINE				NO		
enic Areas			3	4	Not	Total	eff Tower	1	2	3	4	Not	Total
	7:	5 273	293	243	250	1134		25	85	5 84	76	79	
hs. Wetlands	75	283	298	237	77	970		24	71		N MESS		349
mlands	71	219	204	180	194	868				E PA	75	71	315
Storical Sites	82	275	299	253				31	128	136	106	103	504
Itural Resources		the e			385	1156	in in	21	73	65	57	62	278
Viron	64		263	213	203	974		31	80	72	71	66	320
Vironmental Codes	106	352	367	306	312	1443		5	15	17	18		
Do you favor:											10	19	74
ighborhood Stores	91	277	300	251	274	1193							
^{ning/} Child Care	43	160					2	0	88	89	68	66	331
Town Center			161	140	174	678	5	8	154	165	123	119	619
Tor H	47	168	194	134	150	703	5	2	174	180	172	161	739
Post Office											ompile		733
"quate!	83	264	314	250	248	1159	2/						
Income Tax?	22	76	104				36)	87	91	76	101	391
Sales Tax?				66	64	332	82		218	242	227	266 1	035
h do .	35	107	112	86	84	424	75	:	217	206	213	280	991
do you favor?		R	AISIN	G TAXE	ES?						NG TAX		
	27	50	43	46	67	233	13					ES!	
ensily		KI	EPINO	TAXE		data v	13		46	49	50	58 2	216
Rven	67												
cellent		220 4	103 2	12	28	941	,						

Onservation and Oultural:

-

A BRIEF GUIDE TO DEVELOPING DERRY'S PLANNING INFORMATION SYSTEM

Planning is a coordinated effort towards decision making for the future. A computer information system is a tool. By providing quick and easy access to information, a computer information system can increase the productivity of planning efforts. In so doing, the information system can save time and money in the execution of planning responsibilities.

Having a computer information system does not imply that everything in town planning should be automated. Only those functions in which the use of the computer renders benefits in cost, time, or accuracy should be automated. The computer information system can render these productivity

- 1) Word Processing.
- 2) Database Management.
- 3) Routine Mathematical Calculations (spreadsheets).
- 4) Analysis (providing summary statistics). 5) Geographic Mapping.

 - 6) Simulation and Forecasting (projecting trends).

To realize the productivity gains a computer information system affords for town planning, different information should be compiled in a database management system. This information falls into 8 broad categories:

- 1) Natural Resources (excluding water).
- 2) Water.
- 3) Land Use.
- 4) Demographics.
- 5) Housing.
 - 6) Transportation.
 - 7) Tax Information.
 - 8) Utility Considerations.

Clearly, not all of the data we would like to have for planning is easily obtainable - data collection is often a lengthy and expensive process. Even with a high level of commitment to collecting data, it is difficult to avoid accuracy errors. These errors occur in the field (when the data is collected) and upon entering the data onto the computer. Before beginning a data collection program, the benefits that access to the data will yield must be assessed against the costs and tradeoffs of inaccuracies incurred in

To understand how the end uses of the computer and the data collection efforts can be combined to assist town planning, consider the following example of a computerized land use information system:

A land use information system would include a database of all the acres in each of several land use categories: agricultural, residential, commercial, industrial, etc. The land use database could also include specific physical information about each parcel of land - topographical, hydrological, soils information, etc.

It is useful to think of the various types of information as a series of maps. And, in fact, this is technologically feasible with available computer cartographic equipment. Derry could collect, for example, the following basic data: soils, vegetative cover, topographical data, ownership class, hydrological data. With a digitizer and map plotter (standard computer cartography equipment), one can retrieve the basic data from computer files and produce maps of the town. These maps would show any or all of the land use attributes of interest. One could also 'overlay' different maps to produce new ones. Thus, 'overlaying' the topographical map (or database) onto the hydrological map can indicate areas likely to experience high rates of water runoff during storms. The new map can be called the runoff map, with an overlay of a vegetative cover map superimposed over the newly-created runoff map, one could deduce the degree to which different areas in the town are susceptible to erosion. The number of possible overlays is limited first by the available data and second by our creativity in combining information to tell us more about the land than isolated pieces of information reveal.

With these types of information, we can begin an analysis of the potential for soil erosion given what we know about precipitation patterns in southern New Hampshire. In order to successfully computerize an analysis of erosion potential, we would need to enter two items into the computer: 1) precipitation data, and 2) an analytical model that estimates the interactive effects of precipitation, soil type, slope and vegetative cover. Such models exist and are used regularly by organizations such as the Army Corps. of Engineers. Once this information was supplied, the model could assess, on demand, the potential for erosion on any parcel of interest.

Finally, a simulation model could evaluate current land use information and provide a 'what if' analysis, i.e., What is the erosion potential if a gravel pit is dug on this parcel?; What is the erosion potential if a parking lot is constructed on that parcel? A simulation model will allow one to correctly trace out the implications of these 'what ifs'.

Physical data about the different parcels of land within Derry would be collected from any number of sources: field surveys, aerial photos, Landsat photos, Soil Conservation Service information. Likewise, different town departments would be responsible for transmitting data to the main information database within the computer: the building department would update map and lot information; the assessor's office would update property ownership information; the public works department would enter information pertinent to engineering systems within Derry.

At each step of data processing within the land use information system maps would be produced of the parcels and their attributes. Mapping capability is not absolutely essential, however. Access to the data in tabular or chart form would also increase planning productivity significantly. Maps are a more powerful communication tool than charts or tables; hence, it is advantageous to design the computer information system in such a way as to take advantage of mapping technology.

apper in the most of the vertous types of information as a series of cartest in fact, in fact, this is reconsinguished feasible with aveilable computer cartest equipment. Derry could collect, for example, the following beats detail solid. The example, the following the detail solid. See that detail solid detail detail detail solid detail detai

With these types of information, we can begin an antiquist of the potential for soil storion given what we know about precipitation patterns in another now increasing computation of storios, and the would need to enter two from into the computation action date, and 2) an analytical needs that estimates the interpation of precipitation, and type, alope and vegetative tower. Such module eath are and regularly by organizations such as the Army Corps, of frequency of deward, the potential for erosion on any parcel of interest.

Masily, a simulation social could evaluate current had use information and provide a 'unat if enalysis, i.e., that is the erosion potential if a partials in the constructed on that parcell! A simulation model will allow one to correctly track one the implications of these 'what its'.

Physical data about the different parcels of land within Derry would be collected from the number of sources: field surveys, serial photos, land departments yould be responsible for transmiring data to the main information database within the computer; the building department would update and partment to the number of the surface would opdate while in public works department would update and partment to earlier works works department would enter information pertinent to earlier systems within Derry.

At each step of data processing within the land use information system maps would be produced of the parcula and their divibutes, Napping tabular of chart form would also increase planning productivity data in cartly, these are a more powerful communication tool than charts or tables; to it is advantageous to design the computer information system in such a way as to take advantage of mapping technology.

This example is one of many potential uses of a land use information system. It is meant to stimulate the thinking on how Derry can use their computer and database management system to assist in its planning efforts. The modeling/computer technologies described above are currently in use in other organizations. Thus, the land use information system description is firmly grounded in a vision of a planning information system that is thoroughly attainable by a town the size of Derry.

eyeres it is easier to established the chierths on tow Berry can use there are computer and database adnegates the chierths on tow Berry can use their line modeling/computer technologies described about at the planning efforts other of penications. Thus, the land use information system description is three are currently in use in the street at the currently in use in the street at the currently in the three courses, the land use information system description is the course, it is a vision of a planning information system that is

Fred Tompkins Brookview Drive Derry, N.H. 03038

October 28, 1986

To: Members - Derry Planning Board

Subj: Estimated Derry population - 1986

Attached is an estimate of the 1986 population using some easy to find data. The method used was to estimate the change in population of adults, elementary school children, and pre-school children from the prior census year.

I found that a reasonably accurate estimate of the 1980 population could be made using the 1970 census and estimating the population change using:

Change in resident tax count based on the original warrant.

Change in public elementary school population.

Change in births in five years including the target year.

Using the same methodology, the 1986 population would be estimated as 25,656.

I note that the New Hampshire Office of State Planning has issued revised population forecasts for Derry:

1985 - 23,750 1990 - 29,540 2000 - 35,720

I believe that the current population estimates used in the Master Plan and the future population estimates, that are based on the current population estimates, should be adjusted to reflect a more realistic current population estimate.

Fred Tompkins

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Cotober 26, 1986

To: Sephera - Derry Planning Roald

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Account to an estimate of the 1966 population using come easy to find date. The amthod west was to estimate the change in population of adults, elementary sumbol children, and pre-estent children from the prior census year.

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Change in resident ton count based on the original

Change in public elegentary school provincion.

Change in births in five years including the carget

delay the sum sethodology, the 1986 population would be

I here that the New Mampahire Office of Statu Planning has caused replaced population forecasts for Delivit

087,85 - 088 987,85 - 088

I Deliate that the durrent population retigates used in the faster Pleu and the future population estivates, that are based on the courant population estimates, about he educated to reflace a nois realistic current population satisates.

Fred Tosphine

1986 Population Estimate Derry, N.H.

		Resident Taxes	R to 8 School Children	Birthe	3	
1980 Est	imate					
	1980 1970	10.763	2,390 2,040	1,723		
Change		6,512	250			
1970 Cens	sus	=======	350	515	7,377	
					11,712 =	
	Est	imated 1980	population			
	198	O Census	populacion		19,089	•
					18,875	
	Err	or compared	to census			
					214	1.13%
1986 Esti	nate					
19	986	16,725	2,731			
19	980	10,763	2,390	2.201		
				1,723		
	Nep. inc	5,962	341	478	6 704	
1980 Censu	8	======	=======	=======	6,781	
					18,875	
	Esti	mated 1986	Population		/	
			- opulation		25,656	
					=======	

Notes:

- 1. Resident tax count based on original warrant.
- 2. R-8 School children ignores special ed students 1980,1986 3. 5 year births based on reported births including
 - the target year.

1986 Population Estimate Derry, N.H.
Resident School String
Toxes Obildren 5 Years

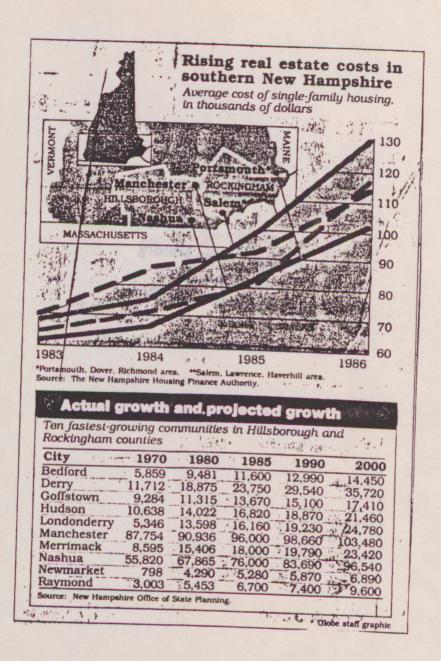
Change Consum Name of Street of Stre

1980 16.728 2,721 2,201 1.723

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in R-6 School obtident ignores appeals as students 1980,1985

L year barens based on reported births including
the torget year.



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DERRY COLL 352.96 han 1986 Hans Klunder Associates. Master plan for the town of Derry, New Hampshire.

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